

# **FOREIGN TUBE TYPES**

## **SUPPLEMENTARY TEST DATA**

**for**

**MODELS 752 & 752A**

**TUBE TESTERS**

## NOTATIONS

- NOTE 1: symbol "X" For dual triodes make normal leakage test first, then repeat leakage test for 2nd section with button S8 pressed down and held. Proceed with 1st section Gm test with S8 released. For 2nd section test on all dual tubes, press down and hold button S8 together with button listed in PRESS column.
- NOTE 2: symbol "+ " Verify shorts by setting filament switch to OFF position.
- NOTE 3: symbol "★ " Approximate starting voltage for voltage regulator tubes.
- NOTE 4: symbol "† " Read 0-100 milliamperes with button S9 pressed down.
- NOTE 5: symbol "VR" For voltage regulator tubes, the figure in the MIN MUT COND (minimum mutual conductance) column indicates the nominal operating voltage.
- NOTE 6: symbol "# " Set BIAS at 100, press and hold down button indicated in the PRESS column while rotating BIAS dial counterclockwise until tube strikes.
- NOTE 7: For TUBE TESTER Models 752, the Universal Adapter CA-5, 1050-164, is available. This Adapter provides tube test sockets for Compactrons, Novars, 5 and 7-pin Nuvisitors, and the new 10-pin tubes, including Decals. Test data for these tubes is supplied in supplementary form with the Adapter. The CA-4, 1050-135 Adapter (discontinued) can still be used but requires the use of the SA-11, 1050-177 Adapter for testing decal types.



TUBE TYPE	FIL.	SELECTORS	BIAS	SHUNT	MULT	PRESS	MIN. MUT. COND	NOTATIONS
35D5	35.0	4590-6870	0	---	X10	S4	300	CAP = P. USE ADAPTER SA-8, 1050-168. CONNECT CAP TO PIN 1 OF OCTAL SOCKET. USE ADAPTER SA-8, 1050-168. USE ADAPTER SA-5, 1050-129.
38A3	35.0	4500-9030	0	55	SH	S3	800	
40KG6	35.0	4510-0392	90	---	X10	S5	475	
42EC4	50.0	4500-7010	0	66	SH	S3	350	
45A5	50.0	1860-2570	10	---	X10	S5	600	
45B5	50.0	4520-7930	16	---	X10	S5	475	PENTODE SECTION. TRIODE SECTION. CAP = P. CAP = P.
50BM8	50.0	4530-6720	26	---	X4	S5	625	
50BM8	50.0	4510-9080	0	---	X2	S5	775	
50E5	50.0	7250-0480	32	---	X10	S5	450	
50JY6	50.0	2750-0483	55	---	X10	S5	350	
85A1	OFF	0000-2080	---	---	VR	S9	85V	120V. REGULATION = 3 V. FROM 1 TO 8 MA. NOTES 3 AND 4.
85A2	OFF	0000-1020	---	---	VR	S9	85V	125V. REGULATION = 3V. FROM 1 TO 10 MA. NOTES 3 AND 4.
90C1	OFF	0000-5070	---	---	VR	S9	90V	110V. REGULATION = 14 V. FROM 1 TO 40 MA. NOTES 3 AND 4.
95A1	OFF	0000-5010	---	---	VR	S9	95V	CONNECT 470K OHM RESISTOR BETWEEN PINS 1 AND 4 ANY SOCKET. 110V. REGULATION = 5V FROM 2 TO 10 MA. NOTES 3 AND 4.
108C1	OFF	0000-5020	---	---	VR	S9	108V	115V. REGULATION = 2V. FROM 5 TO 30 MA. NOTES 3 AND 4.
150B2	OFF	0000-1020	---	---	VR	S9	150V	160V. REGULATION = 5V. FROM 5 TO 15 MA. NOTES 3 AND 4.
150C2	OFF	0000-5020	---	---	VR	S9	150V	155V. REGULATION = 2 V. FROM 5 TO 30 MA. NOTES 3 AND 4.
5894	12.6	1762-0340	35	---	X4	S5	625	RIGHT CAP=P. USE ADAPTER SA-6, 1050-107. LEFT CAP=P.
5894	12.6	1726-0340	35	---	X4	S5	625	
5911	0.6	3540-2100	28	---	X1	S5	60	
5913	1.1	3540-1200	25	---	X1	S5	250	DUAL TRIODE. NOTE 1. DUAL TRIODE. NOTE 1. DUAL TRIODE. NOTE 1.
5920	6.3	4356-2170	25	---	X10	S5	390	
6042	25.0	7841-5263	23	---	X4	S5	400	
6057	12.6	4572-6183	14	---	X4	S5	200	
6059	6.3	4520-7839	20	---	X2	S5	375	
6060	12.6	4572-6183	14	---	X4	S5	625	DUAL TRIODE. NOTE 1.
6061	6.3	4520-7839	18	---	X4	S5	575	DUAL DIODE. NOTE 1.
6063	6.3	4300-6170	0	18	SH	S3	650	
6064	6.3	4310-5726	11	---	X10	S5	300	
6065	6.3	4310-5726	15	---	X4	S5	225	
6066	6.3	4310-7020	15	---	X4	S5	175	TRIODE SECTION.
6066	6.3	4300-6520	0	30	SH	S1	400	DUAL DIODE. NOTE 1.
6067	12.6	4572-6183	25	---	X2	S5	675	DUAL TRIODE. NOTE 1.
6118	6.3	7200-3081	15	---	X4	S5	175	TRIODE SECTION. CAP = G.
6118	6.3	7200-5483	15	30	SH	S1	400	DUAL DIODE. NOTE 1.
6132	6.3	4520-7839	0	---	X10	S5	600	TETRODE NO. 1. RIGHT CAP = P. TETRODE NO. 2. LEFT CAP = P. USE ADAPTER SA-6, 1050-107.
6227	6.3	4520-7839	15	---	X10	S5	425	
6252	12.6	7162-0340	29	---	X2	S5	775	
6252	12.6	7126-0340	29	---	X2	S5	775	
6267	6.3	4590-6138	11	---	X4	S5	300	
6360	12.6	4531-8720	13	---	X4	S5	500	TETRODE NO. 1.
6360	12.6	4513-6720	13	---	X4	S5	500	TETRODE NO. 2.
6374	6.3	4500-0030	0	41	SH	S3	650	CAP = P.
6375	1.1	4510-8000	26	---	X4	S5	425	
6516	6.3	4310-5720	26	---	X4	S5	400	
6686	6.3	4520-7839	10	---	X10	S5	450	AMPL. SECTION. HOLD DOWN S1 & PRESS S5. OSC. SECTION.
6687	6.3	4370-5621	0	---	X2	---	375	
6687	6.3	4310-5627	0	---	X2	S5	375	
6688	6.3	4520-7918	8	---	X10	S5	600	
6689	6.3	4520-6139	15	---	X10	S5	425	
6761	6.3	4520-1730	31	---	X10	S5	475	CAP=P. RIGHT CAP=P. USE ADAPTER SA-6, 1050-107. LEFT CAP=P. USE ADAPTER SA-6, 1050-107. DUAL TRIODE. NOTE 1.
6883	12.6	7250-0318	12	---	X10	S4	425	
6907	12.6	7162-0340	33	---	X4	S5	375	
6907	12.6	7126-0340	33	---	X4	S5	375	
6922	6.3	4572-6183	21	---	X10	S5	675	



TUBE TYPE	FIL.	SELECTORS	BIAS	SHUNT	MULT	PRESS	MIN. MUT. COND	NOTATIONS
6927	6.3	4356-2170	17	---	X10	S5	325	DUAL TRIODE. NOTE 1.
7062	12.6	4572-6183	15	---	X10	S5	400	DUAL TRIODE. NOTE 1.
7119	12.6	5472-9163	17	---	X20	S5	500	DUAL TRIODE NO. NOTE 1.
7308	6.3	4572-6183	21	---	X10	S5	675	DUAL TRIODE. NOTE 1.
7316	12.6	5472-6183	25	---	X2	S5	675	DUAL TRIODE. NOTE 1.
7320	6.3	4520-7930	14	---	X10	S5	475	
7534	6.3	7250-0480	55	---	X4	S5	600	
7643	6.3	4520-6371	12	---	X4	S5	625	PENTODE SECTION.
7643	6.3	4590-1086	26	---	X4	S5	675	TRIODE SECTION.
7645	12.6	4531-8720	12	---	X10	S5	425	TETRODE NO. 1.
7645	12.6	4513-6720	12	---	X10	S5	425	TETRODE NO. 2.
7693	6.3	4310-5627	10	---	X4	S5	425	
7694	6.3	4310-5627	10	---	X2	S5	775	
7699	12.6	4531-8720	12	---	X10	S5	425	TETRODE NO. 1.
7699	12.6	4513-6720	12	---	X10	S5	425	TETRODE NO. 2.
7721	6.3	4520-7918	11	---	X10	S5	625	
7737	6.3	4520-7918	8	---	X10	S5	600	
7751	6.3	2750-3480	58	---	X10	S5	300	
7788	6.3	4520-7938	12	---	X20	S5	350	
7854	12.6	1762-0340	35	---	X4	S5	625	RIGHT CAP=P. USE ADAPTER SA-6, 1050-107.
7854	12.6	1726-0340	35	---	X4	S5	625	LEFT CAP = P.
8223	6.3	4572-6183	29	---	X20	S5	4400	DUAL TRIODE. NOTE 1.
8233	6.3	4580-1390	23	---	X10	S5	800	USE ADAPTER SA-8, 1050-168.
8255	6.3	4590-8020	14	---	X20	S5	475	
8278	6.3	4530-9860	33	---	X10	S5	650	
8298	6.3	7250-0318	12	---	X10	S4	425	CAP=P.
8348	1.4	4513-6700	28	---	X4	S5	350	TETRODE NO. 1.
8348	1.4	4531-8700	28	---	X4	S5	350	TETRODE NO. 2.
8416	12.6	4572-6183	21	---	X10	S5	675	DUAL TRIODE. NOTE 1.
8457	12.6	4531-8720	13	---	X4	S5	500	TETRODE NO. 1
8457	12.6	4513-6720	13	---	X4	S5	500	TETRODE NO. 2
8458	12.6	4531-8720	13	---	X4	S5	500	TETRODE NO. 1. USE ADAPTER SA-4, 1050-144 OR CA-4, 1050-135. NOTE 7.
8458	12.6	4513-6720	13	---	X4	S5	500	MODEL 752A.. NOADAPTER REQUIRED.
8509	2.0	1462-0300	35	---	X4	S5	625	TETRODE NO. 2.
8509	2.0	1462-0300	35	---	X4	S5	625	RIGHT CAP=P. USE ADAPTER SA-6, 1050-107.
8552	12.6	7250-0318	12	---	X10	S4	425	LEFT CAP=P.
8556	6.3	4510-8020	14	---	X20	S5	775	CAP=P.
8562	6.3	4590-8020	14	---	X20	S5	475	
8595	12.6	4531-8720	12	---	X10	S5	475	TETRODE NO. 1
8595	12.6	4513-6720	12	---	X10	S5	475	TETRODE NO. 2
8608	6.3	4580-0392	13	---	X20	S5	750	CAP=P. USE HICKOK ADAPTER SA-8, 1050-168
8637	12.6	5910-6720	37	---	X10	S5	300	TETRODE NO. 1. USE ADAPTER SA-8, 1050-168
8637	12.6	5930-8720	37	---	X10	S5	300	TETRODE NO. 2.
8737	12.6	1762-0340	35	---	X4	S5	625	RIGHT CAP=P. USE ADAPTER SA-6, 1050-107.
8737	12.6	1726-0340	35	---	X4	S5	625	LEFT CAP = P.
18042	20.0	4520-6139	10	---	X10	S5	550	
18043	6.3	5420-6139	15	---	X10	S5	425	
18045	20.0	4520-7839	10	---	X10	S5	500	
18046	17.0	4520-7839	10	---	X10	S5	500	
18048	20.0	1860-2473	20	---	X4	S5	700	
A2900	12.6	5472-6183	14	---	X4	S5	625	DUAL TRIODE. NOTE 1.
AX9903	12.6	1762-0340	35	---	X4	S5	625	RIGHT CAP=P. USE ADAPTER SA-6, 1050-107.
AX9903	12.6	1726-0340	35	---	X4	S5	625	LEFT CAP=P. USE ADAPTER SA-6, 1050-107.
AX9910	12.6	7162-0340	29	---	X2	S5	775	TETRODE NO. 1. RIGHT CAP = P.
AX9910	12.6	7126-0340	29	---	X2	S5	775	TETRODE NO. 2. LEFT CAP = P. USE ADAPTER SA-6, 1050-107.
AZ41	4.3	7800-6000	0	0	SH	S3	400	PLATE NO. 1. USE ADAPTER SA-5, 1050-129.
AZ41	4.3	8700-2000	0	0	SH	S3	400	PLATE NO. 2. USE ADAPTER SA-5, 1050-129.
B36	12.6	7841-5263	23	---	X4	S5	400	DUAL TRIODE. NOTE 1.
B65	6.3	7841-5263	23	---	X4	S5	400	DUAL TRIODE. NOTE 1.
B109	25.0	5472-6183	14	---	X4	S5	625	DUAL TRIODE. NOTE 1.



TUBE TYPE	FIL.	SELECTORS	BIAS	SHUNT	MULT	PRESS	MIN. MUT. COND	NOTATIONS
B152	12.6	4572-6183	14	---	X4	S5	625	DUAL TRIODE. NOTE 1.
B309	12.6	5472-6183	14	---	X4	S5	625	DUAL TRIODE. NOTE 1.
B319	7.5	4562-9371	24	---	X10	S5	375	DUAL TRIODE. NOTE 1.
B329	12.6	5472-6183	25	---	X2	S5	675	DUAL TRIODE. NOTE 1.
B339	12.6	5472-6183	14	---	X4	S5	200	DUAL TRIODE. NOTE 1.
B719	6.3	5472-6183	14	---	X4	S5	625	DUAL TRIODE. NOTE 1.
BPM04	6.3	4310-5620	18	---	X4	S5	575	
C3G	6.3	1860-3452	12	---	X10	S5	550	
C3M	20.0	1860-2473	20	---	X4	S5	700	
CCA	6.3	4572-6183	21	---	X10	S5	675	DUAL TRIODE. NOTE 1.
D3A	6.3	4520-7918	11	---	X10	S5	625	
D63	6.3	7200-5384	0	73	SH	S1	400	DUAL DIODE. NOTE 1.
D77	6.3	3400-7215	0	78	SH	S1	400	DUAL DIODE. NOTE 1.
D152	6.3	3400-7215	0	78	SH	S1	400	DUAL DIODE. NOTE 1.
DA90	1.4	7100-2030	0	0	SH	S1	400	
DAF91	1.4	1760-5400	13	---	X1	S5	400	PENTODE SECTION.
DAF91	1.4	1700-3000	0	15	SH	S1	400	DIODE SECTION.
DAF92	1.4	1760-2300	13	---	X1	S5	400	PENTODE SECTION.
DAF92	1.4	1700-4000	0	15	SH	S1	400	DIODE SECTION.
DC70	1.1	4510-8000	26	---	X4	S5	425	
DC90	1.4	7150-2000	16	---	X1	S5	675	
DCC90	3.0	1750-6000	35	---	X2	S5	625	TRIODE NO. 1.
DCC90	3.0	1730-2000	35	---	X2	S5	625	TRIODE NO. 2.
DCF60	1.1	4730-1205	12	---	X1	S5	300	PENTODE SECTION. NOTE 2.
DCF60	1.1	4750-6003	27	---	X1	S5	175	TRIODE SECTION. NOTE 2.
DD6	6.3	4300-7215	0	78	SH	S1	400	DUAL DIODE. NOTE 1.
DDR7	6.3	4310-5720	26	---	X4	S5	400	
DF33	1.4	7200-3400	11	---	X2	S5	225	CAP = G.
DF60	1.1	3540-1200	8	---	X1	S5	525	
DF61	1.4	3500-2041	0	0	SH	S1	300	MAKE NO GAS TEST.
DF62	1.1	3540-1200	14	---	X4	S4	225	
DF67	0.6	3540-2100	28	---	X1	S5	60	
DF91	1.4	1760-2300	0	---	X2	S4	225	
DF92	1.4	7160-2300	19	---	X2	S5	325	
DF96	1.4	7160-2300	25	---	X2	S5	175	
DF904	1.4	1760-2300	14	---	X2	S5	275	
DH63	6.3	7200-3081	15	---	X4	S5	175	TRIODE SECTION. CAP = G.
DH63	6.3	7200-5483	15	30	SH	S1	400	DUAL DIODE. NOTE 1.
DH77	6.3	4310-7020	15	---	X4	S5	175	TRIODE SECTION.
DH77	6.3	4300-6520	0	30	SH	S1	400	DUAL DIODE. NOTE 1.
DK32	1.4	7250-3400	0	---	X2	--	275	PENTODE SECTION. CAP=G.
DK32	1.4	7250-6430	24	---	X1	S5	250	HOLD DOWN S1 AND PRESS S5
DK91	1.4	1740-3062	10	---	X2	S4	425	OSC. SECTION
DL33	2.5	7250-3400	0	---	X2	--	625	NOTE 2.
DL35	1.4	7250-3400	18	---	X2	--	475	HOLD DOWN S1 AND PRESS S5.
DL36	1.4	7250-3400	0	---	X2	--	625	HOLD DOWN S1 AND PRESS S5.
DL63	6.3	2700-3080	19	---	X2	S5	625	TRIODE SECTION. CAP = G.
DL63	6.3	2700-5480	19	64	SH	S1	400	DUAL DIODE. NOTE 1.
DL66	1.4	5340-1200	32	---	X1	--	400	HOLD DOWN S1 AND PRESS S6.
DL67	1.1	3540-1200	25	---	X1	S5	250	
DL91	1.4	1730-2400	23	---	X2	S4	475	
DL92	2.5	7130-2400	23	---	X2	S4	475	
DL93	2.5	1740-2300	11	---	X2	--	600	HOLD DOWN S1 AND PRESS S5.
DL94	3.0	7160-2300	0	---	X4	--	300	HOLD DOWN S1 AND PRESS S5.
DL95	3.0	7130-2400	0	---	X4	--	300	HOLD DOWN S1 AND PRESS S5.
DL96	2.5	1760-2300	23	---	X2	S4	425	
DL98	2.5	5430-7100	50	---	X2	S5	525	
DM70	1.4	5410-8000	---	---	X2	S6	---	ADJUST BIAS TO VARY BAR LENGTH. DO NOT
DM71	1.4	5410-8000	---	---	X2	S6	---	ADJUST BIAS BELOW 30.
DP61	6.3	4310-5672	17	---	X2	S5	725	ADJUST BIAS TO VARY BAR LENGTH. DO NOT
								ADJUST BIAS BELOW 30.



TUBE TYPE	FIL.	SELECTORS	RIAS	SHUNT	MULT	PRESS	MIN. MUT. COND	NOTATIONS
DX263	2.0	1462-0300	35	---	X4	S5	625	RIGHT CAP=P. USE ADAPTER SA-6, 1050-107
DX263	2.0	1462-0300	35	---	X4	S5	625	LEFT CAP=P
DX296	12.6	5910-6720	37	---	X10	S5	300	TETRODE NO.1. USE ADAPTER SA-8, 1050-168
DX296	12.6	5930-8720	37	---	X10	S5	300	TETRODE NO. 2.
DY30	1.1	7200-0000	0	80	SH	S6	400	CAP = P.
DY51	1.4	2700-0000	0	88	SH	S6	400	CONNECT FIL. LEADS TO OCTAL SOCKET PINS 2 AND 7. SINGLE LEAD = P.
DY80	1.1	1200-0000	0	80	SH	S6	400	CAP = P.
DY86	1.4	4200-0000	0	85	SH	S6	400	CAP = P.
DY87	1.4	4200-0000	0	85	SH	S6	400	CAP = P.
DY802	1.4	1200-0000	0	86	SH	S6	400	CAP=P.
E55L	6.3	4580-1390	23	---	X10	S5	800	USE ADAPTER SA-8, 1050-168.
E80CC	12.6	4572-6183	17	---	X4	S5	425	DUAL TRIODE. NOTE 1.
E80CF	6.3	5420-6371	12	---	X4	S5	625	PENTODE SECTION.
E80CF	6.3	5490-1086	26	---	X4	S5	675	TRIODE SECTION.
E80F	6.3	5490-6138	15	---	X2	S5	575	
E80L	6.3	5420-7839	15	---	X10	S5	425	
E81CC	12.6	5472-6183	14	---	X4	S5	625	DUAL TRIODE. NOTE 1.
E81L	6.3	5420-7839	10	---	X10	S5	450	
E82CC	12.6	5472-6183	25	---	X2	S5	675	DUAL TRIODE. NOTE 1.
E83CC	12.6	5472-6183	14	---	X4	S5	200	DUAL TRIODE. NOTE 1.
E83F	6.3	5420-6139	15	---	X10	S5	425	
E84L	6.3	5420-7930	14	---	X10	S5	475	
E86C	6.3	5420-1030	14	---	X10	S5	880	
E88C	6.3	5490-8020	14	---	X20	S5	475	
E88CC	6.3	5472-6183	21	---	X10	S5	675	DUAL TRIODE. NOTE 1.
E90CC	6.3	4356-2170	25	---	X10	S5	390	DUAL TRIODE. NOTE 1.
E90F	6.3	4310-5627	10	---	X4	S5	425	
E91AA	6.3	4300-7215	0	78	SH	S1	400	DUAL DIODE. NOTE 1.
E91H	6.3	4370-5621	0	---	X2	--	375	AMPL. SECTION. HOLD DOWN S1 & PRESS S5.
E91H	6.3	4310-5627	0	---	X2	S5	375	OSC. SECTION.
E91N	6.3	4310-6025	---	94	SH	S6	650	STRIKES AT ABOUT 27. NOTE 6.
E92CC	6.3	4365-1270	15	---	X10	S5	375	DUAL TRIODE. NOTE 1.
E95F	6.3	4310-5620	10	---	X4	S5	675	
E99F	6.3	4310-5627	10	---	X2	S5	775	
E130L	6.3	7250-0480	55	---	X4	S5	600	
E180CC	12.6	5472-6183	15	---	X10	S5	400	DUAL TRIODE. NOTE 1.
E180F	6.3	5420-7918	8	---	X10	S5	600	
E182CC	12.6	5472-9163	17	---	X20	S5	500	DUAL TRIODE. NOTE 1.
E182F	6.3	9310-6840	13	---	X20	S5	300	
E186F	6.3	5420-7918	8	---	X10	S5	600	
E188CC	6.3	5472-6183	21	---	X10	S5	675	DUAL TRIODE. NOTE 1.
E235L	6.3	2750-3480	58	---	X10	S5	300	
E283CC	6.3	4590-8017	9	---	X2	S5	600	TRIODE NO. 1.
E283CC	6.3	4520-3067	9	---	X2	S5	600	TRIODE NO. 2.
E288CC	6.3	4572-6183	29	---	X20	S5	4400	DUAL TRIODE. NOTE 1.
E810F	6.3	5420-7938	12	---	X20	S5	350	
E2134	6.3	4310-5720	15	---	X10	S5	375	
EA76	6.3	1400-2030	0	81	SH	S1	400	
AAA91	6.3	4300-7215	0	78	SH	S1	400	DUAL DIODE. NOTE 1.
AAA901	6.3	4300-7215	0	78	SH	S1	400	DUAL DIODE. NOTE 1.
AAA901S	6.3	4300-7215	0	78	SH	S1	400	DUAL DIODE. NOTE 1.
EABC80	6.3	5480-9070	15	---	X4	S5	175	TRIODE SECTION.
EABC80	6.3	5400-6070	0	35	SH	S1	400	DIODE NO. 1.
EABC80	6.3	5400-2137	0	78	SH	S1	400	DUAL DIODE. NOTE 1.
EAF42	6.3	8160-2574	25	---	X2	S5	375	PENT. SECT. USE ADAPTER SA-5, 1050-129.
EAF42	6.3	8100-3070	0	61	SH	S1	400	DIODE SECT. USE ADAPTER SA-5, 1050-129.
EAM86	6.3	4580-7693	45	---	X20	S4	----	SOLID BAR.
EAM86	6.3	4580-7693	78	---	X20	S4	----	SPLIT BAR.
EAM86	6.3	4500-2030	0	20	SH	S1	400	DIODE.
EB41	6.3	8100-6473	0	78	SH	S1	400	DUAL DIODE. USE ADAPTER SA-5, 1050-129. NOTE 1.
EB91	6.3	4300-7215	0	78	SH	S1	400	DUAL DIODE. NOTE 1.



TUBE TYPE	FIL.	SELECTORS	BIAS	SHUNT	MULT	PRESS	MIN. MUT. COND	NOTATIONS
EC84	6.3	8710-5020	16	---	X10	S5	625	
EBC33	6.3	2700-3080	19	---	X2	S5	625	TRIODE SECTION. CAP = G.
EBC33	6.3	2700-5440	19	64	SH	S1	400	DUAL DIODE. NOTE 1.
EBC41	6.3	8130-2070	9	---	X1	S5	800	TRIODE SECT. USE ADAPTER SA-5, 1050-129.
EBC41	6.3	8100-6570	0	27	SH	S1	400	DUAL DIODE. USE ADAPTER SA-5, 1050-129. NOTE 1.
EBC81	6.3	5420-1030	9	---	X1	S5	800	TRIODE SECTION.
EBC81	6.3	5400-8630	0	27	SH	S1	400	DUAL DIODE. NOTE 1.
EBC90	6.3	4310-7020	15	---	X4	S5	175	TRIODE SECTION.
EBC90	6.3	4300-6520	0	30	SH	S1	400	DUAL DIODE. NOTE 1.
EBC91	6.3	4310-7020	14	---	X4	S5	200	TRIODE SECTION.
EBC91	6.3	4300-6520	0	30	SH	S1	400	DUAL DIODE. NOTE 1.
EBF32	6.3	7200-3681	22	---	X2	S5	300	PENTODE SECTION. CAP = G.
EBF32	6.3	7200-5481	22	32	SH	S1	400	DUAL DIODE. NOTE 1.
EBF80	6.3	5420-6139	8	---	X4	--	350	PENTODE SECTION. HOLD DOWN S1 & PRESS S5
EBF80	6.3	5400-7839	0	30	SH	S1	400	DUAL DIODE. NOTE 1.
EBF83	6.3	5420-1639	0	44	SH	S1	650	PENTODE SECTION.
EBF83	6.3	5400-8730	0	43	SH	S1	400	DUAL DIODE. NOTE 1.
EBF89	6.3	5420-6139	14	---	X4	S5	450	PENTODE SECTION.
EBF89	6.3	5400-8730	0	60	SH	S1	400	DUAL DIODE. NOTE 1.
EC71	6.3	3610-8057	10	---	X10	S4	350	
EC80	6.3	5410-9030	10	---	X20	S5	375	
EC81	6.3	5410-8030	28	---	X4	S5	625	
EC86	6.3	5420-1030	14	---	X10	S5	880	
EC88	6.3	5490-8020	14	---	X20	S5	475	
EC90	6.3	4360-1070	25	---	X2	S5	675	
EC91	6.3	4310-7050	0	---	X10	S5	525	
EC92	6.3	4360-1070	14	---	X4	S5	625	
EC94	6.3	4320-1050	16	---	X10	S4	400	
EC95	6.3	4320-5670	11	---	X10	S5	650	
EC97	6.3	4320-5016	13	---	X10	S5	800	
EC8065	6.3	4520-1030	14	---	X10	S5	875	
EC900	6.3	4310-5076	17	---	X10	S5	475	
EC8010	6.3	4510-8020	14	---	X20	S5	775	
ECC33	6.3	8741-5263	15	---	X4	S5	400	DUAL TRIODE. NOTE 1.
ECC35	6.3	7841-5263	13	---	X4	S5	250	DUAL TRIODE. NOTE 1.
ECC40	6.3	8163-5274	20	---	X4	S5	450	DUAL TRIODE. USE ADAPTER SA-5, 1050-129. NOTE 1.
ECC81	12.6	5472-6183	14	---	X4	S5	625	DUAL TRIODE. NOTE 1.
ECC82	12.6	5472-6183	25	---	X2	S5	675	DUAL TRIODE. NOTE 1.
ECC83	12.6	5472-6183	14	---	X4	S5	200	DUAL TRIODE. NOTE 1.
ECC84	6.3	5462-9371	24	---	X10	S5	375	DUAL TRIODE. NOTE 1.
ECC85	6.3	5472-6183	14	---	X4	S5	625	DUAL TRIODE. NOTE 1.
ECC86	6.3	5472-6183	19	0	SH	S1	875	DUAL TRIODE. MAKE NO GAS TEST. NOTE 1.
ECC88	6.3	5472-6183	20	---	X10	S5	775	DUAL TRIODE. NOTE 1.
ECC89	6.3	4562-9381	22	---	X10	S5	550	DUAL TRIODE. NOTE 1.
ECC91	6.3	4356-2170	25	---	X10	S5	390	DUAL TRIODE. NOTE 1.
ECC180	6.3	4572-6183	15	---	X10	S5	400	DUAL TRIODE. NOTE 1.
ECC186	12.6	5472-6183	25	---	X2	S5	675	DUAL TRIODE. NOTE 1.
ECC189	6.3	5472-6183	22	---	X10	S5	475	DUAL TRIODE. NOTE 1.
ECC230	6.3	8741-5263	55	---	X4	S4	625	DUAL TRIODE. NOTE 1.
ECC801	12.6	4572-6183	14	---	X4	S5	625	DUAL TRIODE. NOTE 1.
ECC801S	12.6	5472-6183	14	---	X4	S5	625	DUAL TRIODE. NOTE 1.
ECC802	12.6	4572-6183	25	---	X2	S5	675	DUAL TRIODE. NOTE 1.
ECC802S	12.6	5472-6183	25	---	X2	S5	675	DUAL TRIODE. NOTE 1.
ECC803	12.6	5472-6183	14	---	X4	S5	200	DUAL TRIODE. NOTE 1.
ECC803S	12.6	5472-6183	14	---	X4	S5	200	DUAL TRIODE. NOTE 1.
ECC960	6.3	4356-2170	25	---	X10	S5	390	DUAL TRIODE. NOTE 1.
ECC962	6.3	4365-1270	15	---	X10	S5	375	DUAL TRIODE. NOTE 1.
ECC2000	6.3	5680-7091	24	---	X20	S5	450	TRIODE NO. 1. USE ADAPTER SA-11, 1050-177. MODEL 752# USE SA-11 & CA-4. NOTE 7.
ECC2000	6.3	5630-A021	24	---	X20	S5	450	TRIODE NO. 2.



TUBE TYPE	FIL.	SELECTORS	BIAS	SHUNT	MULT	PRESS	MIN. MUT. COND	NOTATIONS
ECF80	6.3	5420-6371	12	---	X4	S5	675	PENTODE SECTION.
ECF80	6.3	5490-1086	26	---	X4	S5	675	TRIODE SECTION.
ECF82	6.3	5420-6370	12	---	X4	S5	475	PENTODE SECTION.
ECF82	6.3	5490-1080	10	---	X10	S5	525	TRIODE SECTION.
ECF83	6.3	5490-6780	10	---	X2	S4	470	PENTODE SECTION.
ECF83	6.3	5420-3010	32	---	X2	S4	700	TRIODE SECTION.
ECF86	6.3	5420-8930	11	---	X10	S5	525	PENTODE SECTION.
ECF86	6.3	5460-7030	33	---	X10	S5	375	TRIODE SECTION.
ECF200	6.3	5630-7824	15	---	X10	S5	375	PENTODE SECTION. USE ADAPTER SA-11, 1050-177. MODEL 752# USE SA-11 & CA-4. NOTE 7.
ECF200	6.3	56A0-9010	14	---	X4	S5	750	TRIODE SECTION.
ECF201	6.3	5630-7824	14	---	X10	S5	375	PENTODE SECTION. USE ADAPTER SA-11, 1050-177. MODEL 752# USE SA-11 & CA-4. NOTE 7.
ECF201	6.3	56A0-9010	30	---	X10	S5	300	TRIODE SECTION.
ECF801	6.3	5420-6710	10	---	X10	S5	475	PENTODE SECTION.
ECF801	6.3	5490-8030	29	---	X10	S5	550	TRIODE SECTION.
ECF802	6.3	4520-6370	14	---	X4	S5	775	PENTODE SECTION.
ECF802	6.3	4590-1080	13	---	X4	S5	550	TRIODE SECTION.
ECF804	6.3	4520-6370	15	---	X10	S5	450	PENTODE SECTION.
ECF804	6.3	4590-1080	17	---	X10	S5	500	TRIODE SECTION.
ECF805	6.3	4570-3280	12	---	X10	S5	450	PENTODE SECTION.
ECF805	6.3	4590-1080	31	---	X10	S5	375	TRIODE SECTION.
ECH35	6.3	7200-3485	10	---	X2	S5	500	HEXODE SECTION. CAP = G.
ECH35	6.3	7250-6084	15	---	X4	S5	475	TRIODE SECTION.
ECH42	6.3	8160-2574	19	---	X2	S5	400	HEXODE SECT. USE ADAPTER SA-5, 1050-129.
ECH42	6.3	8160-3076	27	---	X2	S5	475	TRIODE SECT. USE ADAPTER SA-5, 1050-129.
ECH81	6.3	5420-6137	15	---	X2	S5	475	HEPTODE SECTION.
ECH81	6.3	5490-8032	20	---	X4	S5	475	TRIODE SECTION.
ECH83	6.3	5470-1632	23	---	X1	S1	600	HEPTODE SECTION. MAKE NO GAS TEST.
ECH83	6.3	5490-8030	7	---	X2	S1	300	TRIODE SECTION. MAKE NO GAS TEST.
ECH84	6.3	5420-6731	12	---	X1	--	730	HEPTODE SECT. HOLD DOWN S1 & PRESS S5.
ECH84	6.3	5490-8030	11	---	X4	S4	400	TRIODE SECTION.
ECH200	6.3	5630-7412	15	---	X1	--	700	HEPTODE SECT. HOLD DOWN S1 & PRESS S5. USE ADAPTER SA-11, 1050-177. MODEL 752# USE SA-11 & CA-4. NOTE 7.
ECH200	6.3	5680-A090	23	---	X4	S5	650	TRIODE SECTION.
ECL80	6.3	5490-6837	21	---	X4	S5	500	PENTODE SECTION.
ECL80	6.3	5420-1030	25	---	X2	S5	425	TRIODE SECTION.
ECL82	6.3	5430-6720	26	---	X4	S5	625	PENTODE SECTION.
ECL82	6.3	5410-9080	0	---	X2	S5	775	TRIODE SECTION.
ECL83	6.3	4590-6870	25	---	X10	S5	300	PENTODE SECTION.
ECL83	6.3	4520-1030	15	---	X1	S5	450	TRIODE SECTION.
ECL84	6.3	5480-6970	10	---	X10	S5	630	PENTODE SECTION.
ECL84	6.3	5410-2030	12	---	X4	S5	630	TRIODE SECTION.
ECL85	6.3	5490-6780	36	---	X10	S5	380	PENTODE SECTION.
ECL85	6.3	5420-1030	23	---	X2	S5	960	TRIODE SECTION.
ECL86	6.3	5480-6370	11	---	X10	S5	500	PENTODE SECTION.
ECL86	6.3	5410-9020	10	---	X2	S5	325	TRIODE SECTION.
ECLL800	6.3	4526-3970	15	---	X4	S5	775	PENTODE NO. 1.
ECLL800	6.3	4562-8970	15	---	X4	S5	775	PENTODE NO. 2.
ECLL800	6.3	4526-1070	0	---	X1	S5	100	TRIODE SECTION.
ED500	6.3	4500-8010	0	65	SH	S1	500	CAP = G. USE ADAPTER SA-8, 1050-168.
EF22	6.3	8160-2374	23	---	X04	S5	275	
EF40	6.3	8150-2674	10	---	X2	S5	600	USE ADAPTER SA-5, 1050-129.
EF41	6.3	8160-2570	21	---	X2	S5	475	USE ADAPTER SA-5, 1050-129.
EF42	6.3	8160-2574	10	---	X4	S5	725	USE ADAPTER SA-5, 1050-129.
EF71	6.3	6310-5740	13	---	X4	S5	475	
EF80	6.3	5420-7819	10	---	X10	S5	400	
EF85	6.3	5420-7819	17	---	X4	S5	550	
EF86	6.3	5490-6138	11	---	X4	S5	300	
EF89	6.3	5420-7839	12	---	X4	S5	475	
EF91	6.3	4310-5726	11	---	X10	S5	300	



TUBE TYPE	FIL.	SELECTORS	BIAS	SHUNT	MULT	PRESS	MIN. MUT. COND	NOTATIONS
EF92	6.3	4310-5726	15	---	X4	S5	225	MAKE NO GAS TEST.
EF93	6.3	4310-5672	0	---	X4	S5	500	
EF94	6.3	4310-5672	10	---	X4	S5	475	
EF95	6.3	4310-5620	10	---	X4	S5	675	
EF96	6.3	4310-5620	10	---	X4	S5	625	
EF97	6.3	4370-6523	0	---	X1	S1	500	
EF98	6.3	4310-6527	0	73	SH	S1	650	
EF183	6.3	5420-7819	17	---	X4	S5	650	
EF184	6.3	5420-7819	10	---	X10	S5	500	PENTODE NO. 1. USE ADAPTER SA-11, 1050-177. MODEL 752# USE ADAPTER SA-4 & CA-4. NOTE 7. PENTODE NO. 2. GRID NO. 1. GRID NO. 3.
EF731	6.3	6310-5740	13	---	X4	S5	475	
EF732	6.3	6310-5740	16	---	X4	S5	475	
EF800	6.3	5420-7819	10	---	X10	S5	400	
EF804	6.3	5490-7831	11	---	X4	S5	300	
EF804S	6.3	5490-7831	11	---	X4	S5	300	
EF805S	6.3	5420-7819	17	---	X4	S5	550	
EF806S	6.3	4590-6138	11	---	X4	S5	300	
EF861	6.3	5420-7918	8	---	X10	S5	600	AMPL. SECTION. HOLD DOWN S1 AND PRESS S5 OSC. SECTION AMPL. SECTION. HOLD DOWN S1 & PRESS S5. OSC. SECTION.
EF905	6.3	4310-5620	10	---	X4	S5	675	
EFL200	6.3	5680-A970	16	---	X10	S5	650	
EFL200	6.3	5610-4320	12	---	X10	S5	450	
EH90	6.3	4310-5627	16	---	X1	S5	300	
EH90	6.3	4370-5621	0	---	X1	S5	775	
EH900S	6.3	4370-5621	0	---	X2	--	475	
EH900S	6.3	4310-5627	0	---	X2	S5	475	
EK90	6.3	4370-5621	0	---	X2	--	250	CAP = P. CAP = P. USE ADAPTER SA-5, 1050-129. USE ADAPTER SA-5, 1050-129. CAP = P.
EK90	6.3	4310-6027	20	---	X10	S5	400	
EL33	6.3	7250-3480	13	---	X10	S5	400	
EL34	6.3	7250-3481	23	---	X10	S5	375	
EL36	6.3	7250-0480	32	---	X10	S5	450	
EL37	6.3	7250-3481	17	---	X10	S5	300	
EL38	6.3	7250-0481	0	---	X10	S5	700	
EL41	6.3	8160-2570	10	---	X10	S5	600	
EL42	6.3	8160-2570	17	---	X4	S5	500	CAP = P. CAP = P. USE ADAPTER SA-8, 1050-168. USE ADAPTER SA-8, 1050-168. CAP = P. USE ADAPTER SA-8, 1050-168. USE ADAPTER SA-8, 1050-168. CAP=P. USE HICKOK ADAPTER SA-8, 1050-168
EL80	6.3	4520-7130	10	---	X10	S5	600	
EL81	6.3	5420-0731	51	---	X10	S5	275	
EL83	6.3	5420-7136	0	---	X10	S5	550	
EL84	6.3	5420-7930	14	---	X10	S5	475	
EL85	6.3	5420-7938	17	---	X4	S5	500	
EL86	6.3	5420-7930	16	---	X10	S5	475	
EL90	6.3	4310-5620	18	---	X4	S5	575	
EL91	6.3	4310-5720	26	---	X4	S5	400	PENTODE NO. 1. PENTODE NO. 2. CONNECT A 1 MEGOHM RESISTOR FROM PLATE JACK TO PIN 3 OF LARGE 7 PIN SOCKET. CONNECT A SECOND 1 MEGOHM RESISTOR FROM PLATE JACK TO PIN 6 OF LARGE 7 PIN SOCKET. EYE ONE CLOSES AT BIAS OF ABOUT 35. EYE TWO CLOSES AT BIAS OF ABOUT 68. BIAS = VARY.
EL95	6.3	3410-5620	10	---	X4	S5	600	
EL180	12.6	4520-7813	0	---	X10	S5	500	
EL360	6.3	7250-0480	32	---	X10	S5	450	
EL500	6.3	4520-0780	73	---	X4	S5	400	
EL503	6.3	4530-9860	33	---	X10	S5	650	
EL505	6.3	4510-0392	90	---	X10	S5	475	
EL508	6.3	4510-6370	40	---	X10	S5	475	
EL509	6.3	4510-0392	90	---	X10	S5	475	PENTODE NO. 1. PENTODE NO. 2. CONNECT A 1 MEGOHM RESISTOR FROM PLATE JACK TO PIN 3 OF LARGE 7 PIN SOCKET. CONNECT A SECOND 1 MEGOHM RESISTOR FROM PLATE JACK TO PIN 6 OF LARGE 7 PIN SOCKET. EYE ONE CLOSES AT BIAS OF ABOUT 35. EYE TWO CLOSES AT BIAS OF ABOUT 68. BIAS = VARY.
EL803	6.3	5420-7136	0	---	X10	S5	550	
EL821	6.3	5420-7839	0	---	X10	S5	600	
EL822	6.3	5420-7839	0	---	X10	S5	600	
ELL80	6.3	5420-3170	14	---	X4	S5	770	
ELL80	6.3	5460-8970	14	---	X4	S5	770	
EM34	6.3	7240-5080	---	100	SH	S6	----	



TUBE TYPE	FIL.	SELECTORS	BIAS	SHUNT	MULT	PRESS	MIN. MUT. COND	NOTATIONS
EM80	6.3	5410-9020	---	100	SH	S6	----	CONNECT A 1 MEGOHM RESISTOR FROM PLATE JACK TO OCTAL TEST SOCKET PIN 7. VARY BIAS TO VARY BEAM ANGLE.
EM81	6.3	5410-9020	---	100	SH	S6	----	CONNECT A 1 MEGOHM RESISTOR FROM PLATE JACK TO OCTAL TEST SOCKET PIN 7. VARY BIAS TO VARY BEAM ANGLE.
EM84	6.3	5410-6030	45	---	X20	S5	----	SOLID BAR. (SEE BELOW).
EM84	6.3	5410-6030	0	---	X20	S5	----	SPLIT BAR. JUMPER NOVAL SOCKET PINS 7&9. CONNECT A 470K OHM, 1/2 WATT, 10% RESISTOR FROM THIS JUMPER TO PIN 6.
EM87	6.3	5410-6030	34	---	X20	S5	----	SOLID BAR. (SEE BELOW).
EM87	6.3	5410-6030	0	---	X20	S5	----	SPLIT BAR. JUMPER NOVAL SOCKET PINS 7&9. CONNECT A 100K OHM, 1/2 WATT, 10% RESISTOR FROM THIS JUMPER TO PIN 6.
EMM801	6.3	4590-2031	45	---	X20	S5	----	SOLID BAR. (SEE BELOW).
EMM801	6.3	4590-2031	20	---	X20	S5	----	SPLIT BAR. CONNECT A 390K OHM, 1/2 WATT, 10% RESISTOR BETWEEN PINS 2 & 8 OF THE LOCTAL TEST SOCKET.
EMM801	6.3	4570-2031	45	---	X20	S5	----	SOLID BAR. (SEE BELOW).
EMM801	6.3	4570-2031	20	---	X20	S5	----	SPLIT BAR. CONNECT A 390K OHM, 1/2 WATT, 10% RESISTOR BETWEEN PINS 2 & 6 OF THE LOCTAL TEST SOCKET.
EMM803	6.3	4530-6010	40	---	X20	S5	----	LARGE SOLID BAR. (SEE BELOW).
EMM803	6.3	4530-6010	0	---	X20	S5	----	SPLIT BAR. CONNECT A 470K OHM, 1/2 WATT, 10% RESISTOR BETWEEN PINS 6 & 9 OF THE NOVAL TEST SOCKET.
EMM803	6.3	4520-6010	25	---	X20	S5	----	SMALL SOLID BAR. (SEE BELOW).
EMM803	6.3	4520-6010	0	---	X20	S5	----	NO BAR. CONNECT A 1 MEGOHM, 1/2 WATT, 10% RESISTOR BETWEEN PINS 6 AND 7 OF THE LOCTAL TEST SOCKET.
EN91	6.3	4310-6025	---	93	SH	S6	650	STRIKES AT ABOUT 26. NOTE 6.
E080	6.3	5470-1639	29	---	X2	S5	300	
EY80	6.3	5400-9030	0	55	SH	S3	650	
EY81	6.3	5400-0090	0	50	SH	--	650	CAP = P. SHORT ON 1-2-3-4. HOLD DOWN S7 AND PRESS S3.
EY82	6.3	5400-9030	0	50	SH	S3	525	
EY84	6.3	5400-0030	0	41	SH	S3	650	CAP = P.
EY86	6.3	4200-0000	0	85	SH	S6	400	CAP = P.
EY87	6.3	4200-0000	0	85	SH	S6	400	CAP = P.
EY88	6.3	5400-9000	0	56	SH	S3	800	CONNECT CAP TO EXT. SELF BIAS RES. JACKS MODEL 752A# CAP=K
EY91	6.3	4300-1020	0	18	SH	S3	650	
EY500	6.3	4500-7010	0	80	SH	S3	350	CONNECT CAP TO PIN 1 OF THE OCTAL SOCKET USE ADAPTER SA-8, 1050-168.
EZ2	6.3	7200-5381	0	20	SH	S3	650	DUAL DIODE. NOTE 1
EZ35	6.3	7200-5381	0	20	SH	S3	650	DUAL DIODE. NOTE 1.
EZ40	6.3	8100-6270	0	0	SH	S3	650	DUAL DIODE. USE ADAPTER SA-5, 1050-129. NOTE 1.
EZ80	6.3	5400-7130	0	0	SH	S3	650	DUAL DIODE. NOTE 1.
EZ81	6.3	5400-7130	0	42	SH	S3	650	DUAL DIODE. NOTE 1.
EZ90	6.3	4300-6170	0	18	SH	S3	650	DUAL DIODE. NOTE 1.
GY501	3.0	8100-0000	0	90	SH	S6	400	CAP = P. USE ADAPTER SA-8, 1050-168.
GZ30	5.0	8200-6400	0	57	SH	S3	650	DUAL DIODE. NOTE 1.
GZ32	5.0	8200-6400	0	55	SH	S3	650	DUAL DIODE. NOTE 1.
GZ33	5.0	8200-6400	0	62	SH	S3	800	DUAL DIODE. NOTE 1.
GZ34	5.0	8200-6400	0	68	SH	S3	650	DUAL DIODE. NOTE 1.
H63	6.3	7200-4081	12	---	X4	S5	225	CAP = G.
H-1112	2.0	3140-0280	10	---	X10	--	450	CAP = P. HOLD DOWN S1 & PRESS S5. USE ADAPTER SA-3, 1050-127.
1208	6.3	3140-2080	15	---	X10	S4	600	FOR MODEL 752A# USE SELECTORS AC40-0280. SAME AS ABOVE - NO ADAPTER REQUIRED. USE ADAPTER SA-3, 1050-127 OR CA-4, 1050-135. NOTE 7.
HAA91	12.6	4300-7215	0	78	SH	S1	400	DUAL DIODE. NOTE 1.
HABC80	20.0	5480-9070	15	---	X4	S5	175	TRIODE SECTION.
HABC80	20.0	5400-6070	0	35	SH	S1	400	DIODE NO. 1.

SEE NEXT PAGE FOR CONJINUATION



TUBE TYPE	FIL.	SELECTORS	BIAS	SHUNT	MULT	PRESS	MIN. MUT. COND	NOTATIONS
HABC80	20.0	5400-2137	0	79	SH	S1	400	DUAL DIODE. NOTE 1.
HBC90	12.6	4310-7020	15	---	X4	S5	175	TRIODE SECTION.
HBC90	12.6	4300-6520	0	30	SH	S1	400	DUAL DIODE. NOTE 1.
HBC91	12.6	4310-7025	14	---	X4	S5	200	TRIODE SECTION.
HBC91	12.6	4300-6527	0	30	SH	S1	400	DUAL DIODE. NOTE 1.
HCC85	17.0	5472-6183	14	---	X10	S5	375	DUAL TRIODE. NOTE 1.
HCH81	12.6	5420-6137	15	---	X2	S5	475	HEPTODE SECTION.
HCH81	12.6	5490-8032	20	---	X4	S5	475	TRIODE SECTION.
HCL82	35.0	4530-6720	26	---	X4	S5	625	PENTODE SECTION.
HCL82	35.0	4510-9080	0	---	X2	S5	775	TRIODE SECTION.
HD14	1.4	7200-3000	0	---	X1	S5	175	TRIODE SECTION. CAP = G.
HD14	1.4	7200-5000	0	0	SH	S1	400	DIODE SECTION.
HD30	2.5	5430-7100	50	---	X2	S5	525	
HD93	1.1	2100-0000	0	80	SH	S6	400	CAP = P.
HD94	6.3	7250-0480	28	---	X10	S4	350	CAP = P.
HD96	25.0	7250-0480	28	---	X10	S4	350	CAP = P.
HF61	6.3	8160-2570	21	---	X2	S5	475	USE ADAPTER SA-5, 1050-129.
HF62	6.3	8160-2574	10	---	X4	S5	725	USE ADAPTER SA-5, 1050-129.
HF93	12.6	4310-5672	0	---	X4	S5	500	
HF94	12.6	4310-5672	10	---	X4	S5	475	
HK90	12.6	4370-5621	0	---	X2	--	250	AMPL. SECTION. HOLD DOWN S1 & PRESS S5.
HK90	12.6	4310-6027	20	---	X10	S5	400	OSC. SECTION.
HL90	20.0	4310-5620	18	---	X4	S5	575	
HL92	50.0	4320-7610	13	---	X10	--	475	HOLD DOWN S1 AND PRESS S5.
HL94	35.0	9450-7610	16	---	X10	S5	475	BEFORE PLACING TUBE IN SOCKET JUMPER A 33 OHM, 2 WATT RESISTOR BETWEEN PINS 3&9 ON THE 9-PIN MIN. SOCKET COUNTING COUNTER CLOCKWISE.
HMO4	6.3	4370-5621	0	---	X2	--	250	AMPL. SECTION. HOLD DOWN S1 & PRESS S5.
HMO4	6.3	4310-6027	20	---	X10	S5	400	OSCILLATOR SECTION.
HP6	6.3	4310-5726	11	---	X10	S5	300	
HY90	35.0	4300-5070	0	50	SH	S3	650	
HZ90	12.6	4300-6170	0	18	SH	S3	650	DUAL DIODE. NOTE 1.
KT61	6.3	7250-3480	10	---	X10	S5	450	
KT66	6.3	7250-3481	17	---	X10	S5	300	
KT88	6.3	7250-3481	13	---	X20	S5	225	
KTZ63	6.3	7200-3485	21	---	X2	S5	375	CAP = G.
L63	6.3	7350-3080	23	---	X4	S5	400	
L77	6.3	4360-1070	25	---	X2	S5	675	
LC900	2.5	4310-5076	17	---	X10	S5	475	
LCF80	6.3	4520-6371	12	---	X4	S5	625	PENTODE SECTION.
LCF80	6.3	4590-1086	26	---	X4	S5	675	TRIODE SECTION.
LCF200	6.3	5630-7824	15	---	X10	S5	375	PENTODE SECTION. USE ADAPTER SA-11, 1050-177. MODEL 752# USE SA-11 & CA-4. NOTE 7.
LCF200	6.3	56A0-9010	14	---	X4	S5	750	TRIODE SECTION.
LCF201	6.3	5630-7824	14	---	X10	S5	375	PENTODE SECTION. USE ADAPTER SA-11, 1050-177. MODEL 752# USE SA-11 & CA-4. NOTE 7.
LCF201	6.3	56A0-9010	30	---	X10	S5	300	TRIODE SECTION.
LCF801	5.0	5420-6710	10	---	X10	S5	475	TRIODE SECTION.
LCF801	5.0	5490-8030	29	---	X10	S5	550	TRIODE SECTION.
LCF802	6.3	4520-6370	14	---	X4	S5	775	PENTODE SECTION.
LCF802	6.3	4590-1080	13	---	X4	S5	550	TRIODE SECTION.
LCH200	5.0	5630-7412	15	---	X1	--	700	HEPTODE SECTION. HOLD DOWN S1 & PRESS S5 USE ADAPTER SA-11, 1050-177. MODEL 752# USE SA-11 & CA-4. NOTE 7.
LCH200	5.0	5680-A090	23	---	X4	S5	650	TRIODE SECTION.
LCL80	4.3	5420-1030	25	---	X2	S5	425	TRIODE SECTION.
LCL80	4.3	5490-6837	21	---	X4	S5	500	PENTODE SECTION
LCL82	10.0	4530-6720	26	---	X4	S5	625	PENTODE SECTION.
LCL82	10.0	4510-9080	0	---	X2	S5	775	TRIODE SECTION.
LCL84	10.0	4580-6970	10	---	X10	S5	625	PENTODE SECTION.
LCL84	10.0	4510-2030	12	---	X4	S5	625	TRIODE SECTION.

TUBE TYPE	FIL.	SELECTORS	BIAS	SHUNT	MULT	PRESS	MIN. MUT. COND	NOTATIONS
LCL85	10.0	4520-1030	23	---	X2	S5	950	TRIODE SECTION.
LCL85	10.0	4590-6780	36	---	X10	S5	375	PENTODE SECTION
LFL200	10.0	5680-A970	16	---	X10	S5	650	PENTODE NO. 1. USE ADAPTER SA-11, 1050-177. MODEL 752# USE SA-11 & CA-4. NOTE 7.
LFL200	10.0	5610-4320	12	---	X10	S5	450	PENTODE NO. 2.
LL86	10.0	4520-7930	16	---	X10	S5	475	
LL500	20.0	4520-0780	73	---	X4	S5	400	CAP = P. USE ADAPTER SA-8, 1050-168.
LL505	25.0	4510-0392	90	---	X10	S5	475	CAP = P. USE ADAPTER SA-8, 1050-168.
LL521	20.0	4580-0392	30	---	X10	S4	750	CAP = P. USE ADAPTER SA-8, 1050-168.
LN119	50.0	5430-6720	26	---	X4	S5	625	PENTODE SECTION.
LN119	50.0	5410-9080	0	---	X2	S5	775	TRIODE SECTION.
LN152	6.3	5490-6837	21	---	X4	S5	500	PENTODE SECTION.
LN152	6.3	5420-1030	25	---	X2	S5	425	TRIODE SECTION.
LN309	12.6	4590-6870	25	---	X10	S5	300	PENTODE SECTION.
LN309	12.6	4520-1030	15	---	X1	S5	450	TRIODE SECTION.
LY81	6.3	4500-0090	0	50	SH	--	650	CAP=P. SHORT ON 1-2-3-4. HOLD DOWN S7 AND PRESS S3
LY88	20.0	4500-9000	0	56	SH	S3	800	CONNECT CAP TO EXT. SELF BIAS RES. JACKS MODEL 752A# CAP=K
LY500	25.0	4500-7010	0	80	SH	S3	350	CONNECT CAP TO PIN 1 OF OCTAL SOCKET. USE ADAPTER SA-8, 1050-168.
LZ319	10.0	5420-6371	12	---	X4	S5	625	PENTODE SECTION
LZ319	10.0	5490-1086	26	---	X4	S5	675	TRIODE SECTION
M8079	6.3	4300-7215	0	78	SH	S1	400	DUAL DIODE. NOTE 1.
M8081	6.3	4356-2170	17	---	X10	S5	325	DUAL TRIODE. NOTE 1.
M8083	6.3	4310-5726	11	---	X10	S5	300	
M8098	OFF	0000-1020	---	---	VR	S9	85V	125V. REGULATION = 3V. FROM 1 TO 10 MA. NOTES 3 & 4.
M8100	6.3	4310-5620	10	---	X4	S5	675	
M8136	12.6	5472-6183	25	---	X2	S5	675	DUAL TRIODE. NOTE 1.
M8137	12.6	5472-6183	14	---	X4	S5	200	DUAL TRIODE. NOTE 1.
M8162	12.6	5472-6183	14	---	X4	S5	625	DUAL TRIODE. NOTE 1.
M8195	6.3	5490-6138	11	---	X4	S5	300	
M8196	6.3	4310-5627	0	---	X2	S5	550	
M8212	6.3	4300-7215	0	78	SH	S1	400	DUAL DIODE. NOTE 1.
N14	1.4	7250-3400	18	---	X2	--	475	HOLD DOWN S1 AND PRESS S5
N17	2.5	7130-2400	23	---	X2	S4	475	
N18	3.0	7130-2400	0	---	X4	--	300	HOLD DOWN S1 AND PRESS S5.
N19	3.0	7160-2300	0	---	X4	--	300	HOLD DOWN S1 AND PRESS S5.
N22LL	20.0	4570-9632	34	---	X4	S5	200	USE ADAPTER SA-8, 1050-168.
N30EL	6.3	1050-0324	77	---	X4	S5	750	CAP=P. NOTE 7
N77	6.3	4310-5720	26	---	X4	S5	400	
N78	6.3	4310-5720	10	---	X10	S5	500	
N119	50.0	4520-7930	16	---	X10	S5	475	
N144	6.3	4310-5720	26	---	X4	S5	400	
N151	6.3	8160-2570	17	---	X4	S5	500	USE ADAPTER SA-5, 1050-129.
N152	20.0	5420-0839	42	---	X10	S5	375	CAP = P.
N153	12.6	5420-7136	8	---	X10	S5	475	
N154	17.0	5420-7930	23	---	X10	S5	350	
N309	12.6	5420-7136	8	---	X10	S5	475	
N329	17.0	5420-7930	23	---	X10	S5	350	
N359	20.0	5420-0839	42	---	X10	S5	375	CAP = P.
N709	6.3	5420-7930	14	---	X10	S5	475	
N727	6.3	4310-5620	18	---	X4	S5	575	
OM4	6.3	7200-3080	19	---	X2	S5	625	TRIODE SECTION. CAP = G.
OM4	6.3	7200-5480	19	64	SH	S1	400	DUAL DIODE. NOTE 1.
PABC80	10.0	5480-9070	15	---	X4	S5	175	TRIODE SECTION.
PABC80	10.0	5400-6070	0	35	SH	S1	400	DIODE NO. 1.
PABC80	10.0	5400-2137	0	78	SH	S1	400	DUAL DIODE. NOTE 1.
PC86	4.3	5420-1030	14	---	X10	S5	875	
PC88	4.3	5490-8020	14	---	X20	S5	475	
PC95	3.0	4320-5670	11	---	X10	S5	650	
PC97	4.3	4320-5016	13	---	X10	S5	800	



TUBE TYPE	FIL.	SELECTORS	BIAS	SHUNT	MULT	PRESS	MIN. MUT. COND	NOTATIONS
PC900	4.3	4310-5076	17	---	X10	S5	475	DUAL TRIODE. NOTE 1.
PCC84	7.5	5462-9371	24	---	X10	S5	375	
PCC85	10.0	5472-6183	14	---	X4	S5	625	DUAL TRIODE. NOTE 1.
PCC88	7.5	5472-6183	20	---	X10	S5	775	DUAL TRIODE. NOTE 1.
PCC89	7.5	4562-9381	22	---	X10	S5	550	DUAL TRIODE. NOTE 1.
PCC189	7.5	5472-6183	22	---	X10	S5	475	DUAL TRIODE. NOTE 1.
PCF80	10.0	5420-6371	12	---	X4	S5	625	PENTODE SECTION.
PCF80	10.0	5490-1086	26	---	X4	S5	675	TRIODE SECTION.
PCF82	10.0	5420-6370	12	---	X4	S5	475	PENTODE SECTION.
PCF82	10.0	5490-1080	10	---	X10	S5	525	TRIODE SECTION.
PCF86	7.5	5420-8930	11	---	X10	S5	525	PENTODE SECTION.
PCF86	7.5	5460-7030	33	---	X10	S5	380	TRIODE SECTION.
PCF200	7.5	5630-7824	15	---	X10	S5	375	PENTODE SECTION. USE ADAPTER SA-11, 1050-177. MODEL 752# USE SA-11 & CA-4. NOTE 7.
PCF200	7.5	56A0-9010	14	---	X4	S5	750	TRIODE SECTION.
PCF201	7.5	5630-7824	14	---	X10	S5	375	PENTODE SECTION. USE ADAPTER SA-11, 1050-177. MODEL 752# USE SA-11 & CA-4. NOTE 7.
PCF201	7.5	56A0-9010	30	---	X10	S5	300	TRIODE SECTION.
PCF801	7.5	5420-6710	10	---	X10	S5	475	PENTODE SECTION.
PCF801	7.5	5490-8030	29	---	X10	S5	550	TRIODE SECTION.
PCF802	10.0	4520-6370	14	---	X4	S5	775	PENTODE SECTION.
PCF802	10.0	4590-1080	13	---	X4	S5	550	TRIODE SECTION.
PCF805	7.5	4570-3280	12	---	X10	S5	450	PENTODE SECTION.
PCF805	7.5	4590-1080	31	---	X10	S5	375	TRIODE SECTION.
PCH200	10.0	5630-7412	15	---	X1	--	700	HEPTODE SECTION. HOLD DOWN S1 & PRESS S5 USE ADAPTER SA-11, 1050-177. MODEL 752A# USE SA-11 & CA-4. NOTE 7.
PCH200	10.0	5680-A090	23	---	X4	S5	650	TRIODE SECTION.
PCL82	17.0	5430-6720	26	---	X4	S5	625	PENTODE SECTION.
PCL82	17.0	5410-9080	0	---	X2	S5	775	TRIODE SECTION.
PCL83	12.6	4590-6870	25	---	X10	S5	300	PENTODE SECTION.
PCL83	12.6	4520-1030	15	---	X1	S5	450	TRIODE SECTION.
PCL84	17.0	5480-6970	10	---	X10	S5	630	PENTODE SECTION.
PCL84	17.0	5410-2030	12	---	X4	S5	630	TRIODE SECTION.
PCL85	17.0	5490-6780	36	---	X10	S5	380	PENTODE SECTION.
PCL85	17.0	5420-1030	23	---	X2	S5	960	TRIODE SECTION.
PCL86	12.6	5480-6370	11	---	X10	S5	500	PENTODE SECTION.
PCL86	12.6	5410-9020	10	---	X2	S5	325	TRIODE SECTION.
PD500	7.5	4500-8010	0	65	SH	S1	500	CAP = G. USE ADAPTER SA-8, 1050-168.
PF86	4.3	5490-6138	11	---	X4	S5	300	
PFL200	17.0	5680-A970	16	---	X10	S5	650	PENTODE NO. 1. USE ADAPTER SA-11, 1050-177. MODEL 752A# USE SA-11.
PFL200	17.0	5610-4320	12	---	X10	S5	450	PENTODE NO. 2.
PL2021	6.3	4310-6025	0	93	SH	S6	650	STRIKES AT ABOUT 26. NOTE 6
PL21	6.3	4310-6025	---	93	SH	S6	650	STRIKES ABOUT 26. NOTE 6.
PL36	25.0	7250-0480	32	---	X10	S5	450	CAP = P.
PL81	20.0	5420-0839	42	---	X10	S5	375	CAP = P.
PL82	17.0	5420-7930	23	---	X10	S5	350	
PL83	12.6	4520-7136	8	---	X10	S5	475	
PL84	17.0	5420-7930	30	---	X10	S5	475	HOLD DOWN ' LIFE TEST ' BUTTON.
PL500	25.0	4520-0780	73	---	X4	S5	400	CAP = P. USE ADAPTER SA-8, 1050-168.
PL505	35.0	4510-0392	90	---	X10	S5	475	CAP = P. USE ADAPTER SA-8, 1050-168.
PL508	17.0	4510-6370	40	---	X10	S5	475	USE ADAPTER SA-8, 1050-168.
PL521	25.0	4580-0392	30	---	X10	S4	750	CAP = P. USE ADAPTER SA-8, 1050-168.
PLL80	12.6	5420-3170	14	---	X4	S5	770	PENTODE NO. 1.
PLL80	12.6	5460-8970	14	---	X4	S5	770	PENTODE NO. 2.
PM04	6.3	4310-5672	0	---	X4	S5	500	
PM05	6.3	4310-5620	10	---	X4	S5	675	
PM07	6.3	4310-5726	11	---	X10	S5	300	
PM84	4.3	5410-6030	45	---	X20	S5	----	SOLID BAR (SEE BELOW)
PM84	4.3	5410-6030	0	---	X20	S5	----	SPLIT BAR. JUMPER NOVAL SOCKET PINS 7&9. CONNECT A 470K OHM 1/2 WATT 100/0 RESISTOR FROM THIS JUMPER TO PIN 6

TUBE TYPE	FIL.	SELECTORS	BIAS	SHUNT	MULT	PRESS	MIN. MUT. COND	NOTATIONS
PY80	20.0	5400-9030	0	50	SH	S3	650	
PY81	17.0	5400-0090	0	50	SH	--	650	CAP = P. SHORT ON 1-2-3-4. HOLD DOWN S7 AND PRESS S3.
PY82	20.0	5400-9030	0	50	SH	S3	650	
PY88	25.0	5400-9000	0	56	SH	S3	800	CONNECT CAP TO EXT. SELF BIAS RES. JACKS MODEL 752A# CAP=K.
PY500	50.0	4500-7010	0	80	SH	S3	350	CONNECT CAP TO PIN 1 OF OCTAL SOCKET. USE ADAPTER SA-8, 1050-168.
PY800	19.0	5400-0090	0	50	SH	--	650	CAP = P. SHORT ON 1-2-3-4. HOLD DOWN S7 AND PRESS S3.
QA2403	6.3	4310-5726	11	---	X10	S5	300	
QA2406	12.6	5472-6183	14	---	X4	S5	625	DUAL TRIODE. NOTE 1.
QE03/10	6.3	4590-1673	0	---	X10	S5	425	
QE05/40	6.3	7250-0318	12	---	X10	S4	425	CAP = P.
QE05/40F	12.6	7250-0318	12	---	X10	S4	425	CAP = P.
QE05/40H	25.0	7250-0318	12	---	X10	S4	425	CAP = P.
QE06/50	6.3	5130-0240	28	---	X4	S5	600	CAP = P.
QQE02/5	12.6	5431-8720	12	---	X10	S5	425	TETRODE NO. 1.
QQE02/5	12.6	5413-6720	12	---	X10	S5	425	TETRODE NO. 2.
QQE03/12	12.6	5431-8720	13	---	X4	S5	500	TETRODE NO. 1.
QQE03/12	12.6	5413-6720	13	---	X4	S5	500	TETRODE NO. 2.
QQE03/20	12.6	7162-0340	29	---	X2	S5	775	RIGHT CAP=P. USE ADAPTER SA-6, 1050-107.
QQE03/20	12.6	7126-0340	29	---	X2	S5	775	LEFT CAP = P.
QQE06/40	12.6	7162-0340	35	---	X4	S5	625	RIGHT CAP=P. USE ADAPTER SA-6, 1050-107.
QQE06/40	12.6	7126-0340	35	---	X4	S5	625	LEFT CAP = P.
QQV02/6	12.6	5431-8720	12	---	X10	S5	425	TETRODE NO. 1.
QQV02/6	12.6	5413-6720	12	---	X10	S5	425	TETRODE NO. 2.
QQV03/10	12.6	5431-8720	13	---	X4	S5	500	TETRODE NO. 1.
QQV03/10	12.6	5413-6720	13	---	X4	S5	500	TETRODE NO. 2.
QQV03/20A	12.6	7162-0340	29	---	X2	S5	775	RIGHT CAP=P. USE ADAPTER SA-6, 1050-107.
QQV03/20A	12.6	7126-0340	29	---	X2	S5	775	LEFT CAP = P.
QQV06/40	12.6	1762-0340	35	---	X4	S5	625	RIGHT CAP=P. USE ADAPTER SA-6, 1050-107.
QQV06/40	12.6	1726-0340	35	---	X4	S5	625	LEFT CAP = P.
QS95/10	OFF	0000-5010	---	---	VR	S9	95V	NOTES 364. 110V. FROM 2 TO 10MA. REGULA- TION = 5V. CONNECT A 470K OHM RESISTOR BETWEEN PINS 1 AND 4 ON ANY SOCKET.
QV05/25	6.3	5130-0240	28	---	X4	S5	600	CAP = P.
STV-85/10	OFF	0000-1020	---	---	VR	S9	85V	NOTES 364. 125V. FROM 1 TO 10MA. REG.=3V
STV-108/30	OFF	0000-5020	---	---	VR	S9	108V	NOTES 364. 115V FROM 5 TO 30MA. REG.=2V.
STV-150/30	OFF	0000-5020	---	---	VR	S9	150V	NOTES 364. 155V FROM 5 TO 30MA. REG.=2V.
U26	6.3	4200-0000	0	85	SH	S6	400	CAP = P.
U49	6.3	4200-0000	0	85	SH	S6	400	CAP = P.
U50	5.0	8200-6000	0	36	SH	S3	400	PLATE NO. 1
U50	5.0	8200-4000	0	36	SH	S3	400	PLATE NO. 2
U52	5.0	8200-6000	0	35	SH	S3	650	PLATE NO. 1.
U52	5.0	8200-4000	0	30	SH	S3	650	PLATE NO. 2.
U70	6.3	7200-5381	0	20	SH	S3	650	DUAL DIODE. NOTE 1.
U78	6.3	4300-6170	0	18	SH	S3	650	DUAL DIODE. NOTE 1.
U119	35.0	5400-9030	0	55	SH	S3	800	
U149	6.3	8100-6370	0	20	SH	S3	650	DUAL DIODE. NOTE 1
U152	20.0	5400-9030	0	50	SH	S3	650	
U153	17.0	5400-0090	0	50	SH	--	650	CAP = P. SHORT ON 1-2-3-4. HOLD DOWN S7 AND PRESS S3.
U154	20.0	5400-9030	0	50	SH	S3	650	
U192	20.0	5400-9030	0	50	SH	S3	650	
U309	20.0	5400-9030	0	50	SH	S3	650	
U381	35.0	5400-9030	0	55	SH	S3	800	
U709	6.3	5400-7130	0	42	SH	S3	650	DUAL DIODE. NOTE 1.
UAA91	20.0	4300-7215	0	78	SH	S1	400	DUAL DIODE. NOTE 1.
UABC80	25.0	5480-9070	15	---	X4	S5	175	TRIODE SECTION.
UABC80	25.0	5400-6070	0	35	SH	S1	400	DIODE NO. 1.
UABC80	25.0	5400-2137	0	78	SH	S1	400	DUAL DIODE. NOTE 1.
UAF42	12.6	8160-2574	25	---	X2	S5	375	PENT. SECT. USE ADAPTER SA-5, 1050-129.
SEE NEXT PAGE FOR CONTINUATION								



TUBE TYPE	FIL.	SFLECTORS	BIAS	SHUNT	MULT	PRESS	MIN. MUT. COND.	NOTATIONS
UAF42	12.6	8100-3070	0	61	SH	S1	400	DIODE SECT. USE ADAPTER SA-5, 1050-129.
UB41	20.0	8100-6473	0	78	SH	S1	400	DUAL DIODE. USE ADAPTER SA-5, 1050-129 NOTE 1
U149	20.0	5420-6139	14	---	X4	S5	450	PENTODE SECTION
U149	20.0	5400-8730	0	60	SH	S1	400	DUAL DIODE. NOTE 1
UBC41	12.6	8130-2070	9	---	X1	S5	800	TRIODE SECT. USE ADAPTER SA-5, 1050-129.
UBC41	12.6	8100-6570	0	27	SH	S1	400	DUAL DIODE. NOTE 1.
UBC81	12.6	5420-1030	9	---	X1	S5	800	USE ADAPTER SA-5, 1050-129.
UBC81	12.6	5400-8630	0	27	SH	S1	400	TRIODE SECTION.
UBF80	17.0	5420-6139	8	---	X4	--	350	DUAL DIODE. NOTE 1.
UBF80	17.0	5400-7839	0	30	SH	S1	400	PENTODE SECTION. HOLD DOWN S1 & PRESS S5
UBF89	20.0	5420-6139	14	---	X4	S5	450	DUAL DIODE. NOTE 1.
UBF89	20.0	5400-8730	0	60	SH	S1	400	PENTODE SECTION.
UC92	10.0	4360-1070	14	---	X4	S5	625	DUAL DIODE. NOTE 1.
UCC85	25.0	5472-6183	14	---	X4	S5	625	HEPTODE SECT. USE ADAPTER SA-5, 1050-129
UCH42	12.6	8160-2574	19	---	X2	S5	400	TRIODE SECT. USE ADAPTER SA-5, 1050-129.
UCH42	12.6	8140-3076	27	---	X2	S5	475	HEPTODE SECTION.
UCH81	20.0	5420-6137	15	---	X2	S5	475	TRIODE SECTION.
UCH81	20.0	5490-8032	20	---	X4	S5	475	PENTODE SECTION.
UCL82	50.0	5430-6720	26	---	X4	S5	625	TRIODE SECTION.
UCL82	50.0	5410-9080	0	---	X2	S5	775	PENTODE SECTION.
UCL83	35.0	4590-6870	25	---	X10	S5	300	TRIODE SECTION.
UCL83	35.0	4520-1030	15	---	X1	S5	450	USE ADAPTER SA-5, 1050-129.
UF41	12.6	8160-2570	21	---	X2	S5	475	USE ADAPTER SA-5, 1050-129.
UF42	20.0	8160-2574	10	---	X4	S5	725	USE ADAPTER SA-5, 1050-129.
UF80	20.0	5420-7819	10	---	X10	S5	400	
UF85	20.0	5420-7819	17	---	X4	S5	550	
UF86	12.6	5490-6138	11	---	X4	S5	300	
UF89	12.6	5420-7839	12	---	X4	S5	475	
UL41	50.0	8160-2570	10	---	X10	S5	600	USE ADAPTER SA-5, 1050-129.
UL84	50.0	5420-7930	16	---	X10	S5	475	
UM80	20.0	5410-9020	---	100	SH	S6	----	CONNECT A 1 MEGOHM RESISTOR FROM PLATE JACK TO OCTAL SOCKET PIN 7. VARY BIAS TO VARY BEAM ANGLE.
UY41	35.0	8100-2070	0	48	SH	S3	500	SET 'LINE ADJUST' AT 625.
UY42	35.0	8100-2070	0	48	SH	S3	500	USE ADAPTER SA-5, 1050-129.
UY85	35.0	5400-9030	0	55	SH	S3	800	SET 'LINE ADJUST' AT 625.
UY89	35.0	4500-9030	0	48	SH	S3	500	USE ADAPTER SA-5, 1050-129.
W17	1.4	7160-2300	0	---	X2	S4	225	
W77	6.3	4310-5726	15	---	X4	S5	225	
X17	1.4	7140-3062	10	---	X2	S4	425	NOTE 2.
X78	6.3	4320-5107	39	---	X2	S5	250	HEXODE SECTION.
X78	6.3	4370-6000	21	---	X20	S5	950	TRIODE SECTION.
X108	20.0	4320-5107	39	---	X2	S5	250	HEXODE SECTION.
X108	20.0	4370-6000	21	---	X20	S5	950	TRIODE SECTION.
X119	20.0	5420-6137	15	---	X2	S5	475	HEPTODE SECTION.
X119	20.0	5490-8032	20	---	X4	S5	475	TRIODE SECTION.
X142	12.6	8160-2574	19	---	X2	S5	400	HEPTODE SECT. USE ADAPTER SA-5, 1050-129
X142	12.6	8140-3076	27	---	X2	S5	475	TRIODE SECTION.
X719	6.3	5420-6137	15	---	X2	S5	475	HEPTODE SECTION.
X719	6.3	5490-8032	20	---	X4	S5	475	TRIODE SECTION.
X727	6.3	4370-5671	0	---	X2	--	250	AMPL. SECTION. HOLD DOWN S1 & PRESS S5.
X727	6.3	4310-6027	20	---	X10	S5	400	OSCILLATOR SECTION.
XC95	2.0	4320-5670	11	---	X10	S5	650	
XC97	2.5	4320-5016	13	---	X10	S5	800	
XC900	2.0	4310-5076	17	---	X10	S5	475	
XCC82	6.3	4572-6183	25	---	X2	S5	675	DUAL TRIODE. NOTE 1.
XCC189	4.3	5472-6183	22	---	X10	S5	475	DUAL TRIODE. NOTE 1.
XCF80	4.3	5420-6371	12	---	X4	S5	625	PENTODE SECTION.
XCF80	4.3	5490-1086	26	---	X4	S5	675	TRIODE SECTION.
XCF86	5.0	4520-8930	11	---	X10	S5	475	PENTODE SECTION.
SEE NEXT PAGE FOR CONTINUATION								

TUBE TYPE	FIL.	SELECTORS	BIAS	SHUNT	MULT	PRESS	MIN. MUT. COND	NOTATIONS
XCF86	5.0	4560-7030	33	---	X10	S5	350	TRIODE SECTION.
XCF801	4.3	5420-6710	10	---	X10	S5	475	PENTODE SECTION
XCF801	4.3	5490-8030	29	---	X10	S5	550	TRIODE SECTION
XCH81	3.0	5420-6137	15	---	X2	S5	475	HEPTODE SECTION.
XCH81	3.0	5490-8032	20	---	X4	S5	475	TRIODE SECTION.
XCL82	7.5	5430-6720	26	---	X4	S5	625	PENTODE SECTION.
XCL82	7.5	5410-9080	0	---	X2	S5	775	TRIODE SECTION.
XCL84	7.5	5480-6970	10	---	X10	S5	630	PENTODE SECTION.
XCL84	7.5	5410-2030	12	---	X4	S5	630	TRIODE SECTION.
XCL85	10.0	5490-6780	36	---	X10	S5	380	PENTODE SECTION.
XCL85	10.0	5420-1030	23	---	X2	S5	960	TRIODE SECTION.
XF80	3.0	5420-7819	10	---	X10	S5	400	
XF85	3.0	5420-7819	17	---	X4	S5	550	
XF86	2.5	5490-6138	11	---	X4	S5	300	
XF183	3.0	5420-7819	17	---	X4	S5	650	
XF184	3.0	5420-7819	10	---	X10	S5	500	
XL36	12.6	7250-0480	32	---	X10	S5	450	CAP = P.
XL84	7.5	5420-7930	14	---	X10	S5	475	
XL86	7.5	5420-7930	16	---	X10	S5	475	
XL500	12.6	4520-0780	73	---	X4	S5	400	CAP=P. USE ADAPTER SA-8, 1050-168.
XY88	17.0	5400-9000	0	56	SH	S3	800	CONNECT CAP TO EXT. SELF BIAS RES. JACKS MODEL 752A= CAP=K
YC95	3.0	4320-5670	11	---	X10	S5	650	
YC97	3.0	4320-5016	13	---	X10	S5	800	
YCC189	5.0	5472-6183	22	---	X10	S5	475	DUAL TRIODE. NOTE 1.
YF183	4.3	5420-7819	17	---	X4	S5	650	
YF184	4.3	5420-7819	10	---	X10	S5	500	
YL84	6.3	5420-7930	14	---	X10	S5	475	
YL1080	1.4	4513-6700	28	---	X4	S5	350	TETRODE NO. 1.
YL1080	1.4	4531-8700	28	---	X4	S5	350	TETRODE NO. 2.
YL1370	6.3	7250-0318	12	---	X10	S4	425	CAP=P.
YL1371	12.6	7250-0318	12	---	X10	S4	425	CAP=P.
YL1372	25.0	7250-0318	12	---	X10	S4	425	CAP=P.
Z63	6.3	7200-3485	21	---	X2	S5	375	CAP=G
Z77	6.3	4310-5726	11	---	X10	S5	300	
Z142	20.0	8160-2574	10	---	X4	S5	725	USE ADAPTER SA-5, 1050-129
Z150	6.3	8160-2574	10	---	X4	S5	725	USE ADAPTER SA-5, 1050-129
Z152	6.3	5420-7819	10	---	X10	S5	400	
Z719	6.3	5420-7819	10	---	X10	S5	400	
Z729	6.3	5490-6138	11	---	X4	S5	300	
ZD17	1.4	7160-5400	13	---	X1	S5	400	PENTODE SECTION.
ZD17	1.4	7100-3000	0	15	SH	S1	400	DIODE SECTION.
ZD152	6.3	5420-6139	8	---	X4	--	350	PENTODE SECTION. HOLD DOWN S1 & PRESS S5
ZD152	6.3	5400-7839	0	30	SH	S1	400	DUAL DIODE. NOTE 1.









**FOREIGN TUBE TYPES**

**SUPPLEMENTARY TEST DATA**

**for**

**MODELS 752 & 752A**

**TUBE TESTERS**

## NOTATIONS

- NOTE 1: symbol "X" For dual triodes make normal leakage test first, then repeat leakage test for 2nd section with button S8 pressed down and held. Proceed with 1st section Gm test with S8 released. For 2nd section test on all dual tubes, press down and hold button S8 together with button listed in PRESS column.
- NOTE 2: symbol "+" Verify shorts by setting filament switch to OFF position.
- NOTE 3: symbol "★" Approximate starting voltage for voltage regulator tubes.
- NOTE 4: symbol "†" Read 0-100 milliamperes with button S9 pressed down.
- NOTE 5: symbol "VR" For voltage regulator tubes, the figure in the MIN MUT COND (minimum mutual conductance) column indicates the nominal operating voltage.
- NOTE 6: symbol "# " Set BIAS at 100, press and hold down button indicated in the PRESS column while rotating BIAS dial counterclockwise until tube strikes.
- NOTE 7: For TUBE TESTER Models 752, the Universal Adapter CA-5, 1050-164, is available. This Adapter provides tube test sockets for Compactrons, Novars, 5 and 7-pin Nuvistors, and the new 10-pin tubes, including Decals. Test data for these tubes is supplied in supplementary form with the Adapter. The CA-4, 1050-135 Adapter (discontinued) can still be used but requires the use of the SA-11, 1050-177 Adapter for testing decal types.



TUBE TYPE	FIL.	SELECTORS	BIAS	SHUNT	MULT	PRESS	MIN. MUT. COND	NOTATIONS
35D5	35.0	4590-6870	0	---	X10	S4	300	CAP = P. USE ADAPTER SA-8, 1050-168. CONNECT CAP TO PIN 1 OF OCTAL SOCKET. USE ADAPTER SA-8, 1050-168. USE ADAPTER SA-5, 1050-129.
38A3	35.0	4500-9030	0	55	SH	S3	800	
40KG6	35.0	4510-0392	90	---	X10	S5	475	
42EC4	50.0	4500-7010	0	66	SH	S3	350	
45A5	50.0	1860-2570	10	---	X10	S5	600	PENTODE SECTION. TRIODE SECTION. CAP = P. CAP = P.
45B5	50.0	4520-7930	16	---	X10	S5	475	
50BM8	50.0	4530-6720	26	---	X4	S5	625	
50BM8	50.0	4510-9080	0	---	X2	S5	775	
50E5	50.0	7250-0480	32	---	X10	S5	450	
50JY6	50.0	2750-0483	55	---	X10	S5	350	
85A1	OFF	0000-2080	---	---	VR	S9	85V	120V. REGULATION = 3 V. FROM 1 TO 8 MA. NOTES 3 AND 4.
85A2	OFF	0000-1020	---	---	VR	S9	85V	125V. REGULATION = 3V. FROM 1 TO 10 MA. NOTES 3 AND 4.
90C1	OFF	0000-5070	---	---	VR	S9	90V	110V. REGULATION = 14 V. FROM 1 TO 40 MA. NOTES 3 AND 4.
95A1	OFF	0000-5010	---	---	VR	S9	95V	CONNECT 470K OHM RESISTOR BETWEEN PINS 1 AND 4 ANY SOCKET. 110V. REGULATION = 5V FROM 2 TO 10 MA. NOTES 3 AND 4.
108C1	OFF	0000-5020	---	---	VR	S9	108V	115V. REGULATION = 2V. FROM 5 TO 30 MA. NOTES 3 AND 4.
150B2	OFF	0000-1020	---	---	VR	S9	150V	160V. REGULATION = 5V. FROM 5 TO 15 MA. NOTES 3 AND 4.
150C2	OFF	0000-5020	---	---	VR	S9	150V	155V. REGULATION = 2 V. FROM 5 TO 30 MA. NOTES 3 AND 4.
5894	12.6	1762-0340	35	---	X4	S5	625	RIGHT CAP=P. USE ADAPTER SA-6, 1050-107. LEFT CAP=P.
5894	12.6	1726-0340	35	---	X4	S5	625	
5911	0.6	3540-2100	28	---	X1	S5	60	
5913	1.1	3540-1200	25	---	X1	S5	250	DUAL TRIODE. NOTE 1. DUAL TRIODE. NOTE 1. DUAL TRIODE. NOTE 1.
5920	6.3	4356-2170	25	---	X10	S5	390	
6042	25.0	7841-5263	23	---	X4	S5	400	
6057	12.6	4572-6183	14	---	X4	S5	200	
6059	6.3	4520-7839	20	---	X2	S5	375	
6060	12.6	4572-6183	14	---	X4	S5	625	DUAL TRIODE. NOTE 1.
6061	6.3	4520-7839	18	---	X4	S5	575	DUAL DIODE. NOTE 1.
6063	6.3	4300-6170	0	18	SH	S3	650	
6064	6.3	4310-5726	11	---	X10	S5	300	
6065	6.3	4310-5726	15	---	X4	S5	225	
6066	6.3	4310-7020	15	---	X4	S5	175	
6066	6.3	4300-6520	0	30	SH	S1	400	DUAL DIODE. NOTE 1.
6067	12.6	4572-6183	25	---	X2	S5	675	DUAL TRIODE. NOTE 1.
6118	6.3	7200-3081	15	---	X4	S5	175	TRIODE SECTION. CAP = G.
6118	6.3	7200-5483	15	30	SH	S1	400	DUAL DIODE. NOTE 1.
6132	6.3	4520-7839	0	---	X10	S5	600	TETRODE NO. 1. RIGHT CAP = P. TETRODE NO. 2. LEFT CAP = P. USE ADAPTER SA-6, 1050-107.
6227	6.3	4520-7839	15	---	X10	S5	425	
6252	12.6	7162-0340	29	---	X2	S5	775	
6252	12.6	7126-0340	29	---	X2	S5	775	
6267	6.3	4590-6138	11	---	X4	S5	300	
6360	12.6	4531-8720	13	---	X4	S5	500	TETRODE NO. 1.
6360	12.6	4513-6720	13	---	X4	S5	500	TETRODE NO. 2.
6374	6.3	4500-0030	0	41	SH	S3	650	CAP = P.
6375	1.1	4510-8000	26	---	X4	S5	425	AMPL. SECTION. HOLD DOWN S1 & PRESS S5. OSC. SECTION.
6516	6.3	4310-5720	26	---	X4	S5	400	
6686	6.3	4520-7839	10	---	X10	S5	450	
6687	6.3	4370-5621	0	---	X2	---	375	
6687	6.3	4310-5627	0	---	X2	S5	375	
6688	6.3	4520-7918	8	---	X10	S5	600	
6689	6.3	4520-6139	15	---	X10	S5	425	
6761	6.3	4520-1730	31	---	X10	S5	475	
6883	12.6	7250-0318	12	---	X10	S4	425	
6907	12.6	7162-0340	33	---	X4	S5	375	
6907	12.6	7126-0340	33	---	X4	S5	375	RIGHT CAP=P. USE ADAPTER SA-6, 1050-107. LEFT CAP=P. USE ADAPTER SA-6, 1050-107.
6922	6.3	4572-6183	21	---	X10	S5	675	DUAL TRIODE. NOTE 1.

TUBE TYPE	FIL.	SELECTORS	BIAS	SHUNT	MULT	PRESS	MIN. MUT. COND.	NOTATIONS
6927	6.3	4356-2170	17	---	X10	S5	325	DUAL TRIODE. NOTE 1.
7062	12.6	4572-6183	15	---	X10	S5	400	DUAL TRIODE. NOTE 1.
7119	12.6	5472-9163	17	---	X20	S5	500	DUAL TRIODE NO. NOTE 1.
7308	6.3	4572-6183	21	---	X10	S5	675	DUAL TRIODE. NOTE 1.
7316	12.6	5472-6183	25	---	X2	S5	675	DUAL TRIODE. NOTE 1.
7320	6.3	4520-7930	14	---	X10	S5	475	
7534	6.3	7250-0480	55	---	X4	S5	600	
7643	6.3	4520-6371	12	---	X4	S5	625	PENTODE SECTION.
7643	6.3	4590-1086	26	---	X4	S5	675	TRIODE SECTION.
7645	12.6	4531-8720	12	---	X10	S5	425	TETRODE NO. 1.
7645	12.6	4513-6720	12	---	X10	S5	425	TETRODE NO. 2.
7693	6.3	4310-5627	10	---	X4	S5	425	
7694	6.3	4310-5627	10	---	X2	S5	775	
7699	12.6	4531-8720	12	---	X10	S5	425	TETRODE NO. 1.
7699	12.6	4513-6720	12	---	X10	S5	425	TETRODE NO. 2.
7721	6.3	4520-7918	11	---	X10	S5	625	
7737	6.3	4520-7918	8	---	X10	S5	600	
7751	6.3	2750-3480	58	---	X10	S5	300	
7788	6.3	4520-7938	12	---	X20	S5	350	
7854	12.6	1762-0340	35	---	X4	S5	625	RIGHT CAP=P. USE ADAPTER SA-6, 1050-107.
7854	12.6	1726-0340	35	---	X4	S5	625	LEFT CAP = P.
8223	6.3	4572-6183	29	---	X20	S5	4400	DUAL TRIODE. NOTE 1.
8233	6.3	4580-1390	23	---	X10	S5	800	USE ADAPTER SA-8, 1050-168.
8255	6.3	4590-8020	14	---	X20	S5	475	
8278	6.3	4530-9860	33	---	X10	S5	650	
8298	6.3	7250-0318	12	---	X10	S4	425	CAP=P.
8348	1.4	4513-6700	28	---	X4	S5	350	TETRODE NO. 1.
8348	1.4	4531-8700	28	---	X4	S5	350	TETRODE NO. 2.
8416	12.6	4572-6183	21	---	X10	S5	675	DUAL TRIODE. NOTE 1.
8457	12.6	4531-8720	13	---	X4	S5	500	TETRODE NO. 1
8457	12.6	4513-6720	13	---	X4	S5	500	TETRODE NO. 2
8458	12.6	4531-8720	13	---	X4	S5	500	TETRODE NO. 1. USE ADAPTER SA-4, 1050-144 OR CA-4, 1050-135. NOTE 7.
8458	12.6	4513-6720	13	---	X4	S5	500	MODEL 752A.. NOADAPTER REQUIRED.
8509	2.0	1462-0300	35	---	X4	S5	625	TETRODE NO. 2.
8509	2.0	1462-0300	35	---	X4	S5	625	RIGHT CAP=P. USE ADAPTER SA-6, 1050-107.
8552	12.6	7250-0318	12	---	X10	S4	425	LEFT CAP=P.
8556	6.3	4510-8020	14	---	X20	S5	775	CAP=P.
8562	6.3	4590-8020	14	---	X20	S5	475	
8595	12.6	4531-8720	12	---	X10	S5	475	TETRODE NO. 1
8595	12.6	4513-6720	12	---	X10	S5	475	TETRODE NO. 2
8608	6.3	4580-0392	13	---	X20	S5	750	CAP=P. USE HICKOK ADAPTER SA-8, 1050-168
8637	12.6	5910-6720	37	---	X10	S5	300	TETRODE NO. 1. USE ADAPTER SA-8, 1050-168
8637	12.6	5930-8720	37	---	X10	S5	300	TETRODE NO. 2.
8737	12.6	1762-0340	35	---	X4	S5	625	RIGHT CAP=P. USE ADAPTER SA-6, 1050-107.
8737	12.6	1726-0340	35	---	X4	S5	625	LEFT CAP =P.
18042	20.0	4520-6139	10	---	X10	S5	550	
18043	6.3	5420-6139	15	---	X10	S5	425	
18045	20.0	4520-7839	10	---	X10	S5	500	
18046	17.0	4520-7839	10	---	X10	S5	500	
18048	20.0	1860-2473	20	---	X4	S5	700	
A2900	12.6	5472-6183	14	---	X4	S5	625	DUAL TRIODE. NOTE 1.
AX9903	12.6	1762-0340	35	---	X4	S5	625	RIGHT CAP=P. USE ADAPTER SA-6, 1050-107.
AX9903	12.6	1726-0340	35	---	X4	S5	625	LEFT CAP=P. USE ADAPTER SA-6, 1050-107.
AX9910	12.6	7162-0340	29	---	X2	S5	775	TETRODE NO. 1. RIGHT CAP = P.
AX9910	12.6	7126-0340	29	---	X2	S5	775	TETRODE NO. 2. LEFT CAP = P.
AZ41	4.3	7800-6000	0	0	SH	S3	400	USE ADAPTER SA-6, 1050-107.
AZ41	4.3	8700-2000	0	0	SH	S3	400	PLATE NO. 1. USE ADAPTER SA-5, 1050-129.
B36	12.6	7841-5263	23	---	X4	S5	400	PLATE NO. 2. USE ADAPTER SA-5, 1050-129.
B65	6.3	7841-5263	23	---	X4	S5	400	DUAL TRIODE. NOTE 1.
B109	25.0	5472-6183	14	---	X4	S5	625	DUAL TRIODE. NOTE 1.



TUBE TYPE	FIL.	SELECTORS	BIAS	SHUNT	MULT	PRESS	MIN. MUT. COND	NOTATIONS
B152	12.6	4572-6183	14	---	X4	S5	625	DUAL TRIODE. NOTE 1.
B309	12.6	5472-6183	14	---	X4	S5	625	DUAL TRIODE. NOTE 1.
B319	7.5	4562-9371	24	---	X10	S5	375	DUAL TRIODE. NOTE 1.
B329	12.6	5472-6183	25	---	X2	S5	675	DUAL TRIODE. NOTE 1.
B339	12.6	5472-6183	14	---	X4	S5	200	DUAL TRIODE. NOTE 1.
B719	6.3	5472-6183	14	---	X4	S5	625	DUAL TRIODE. NOTE 1.
BPM04	6.3	4310-5620	18	---	X4	S5	575	
C3G	6.3	1860-3452	12	---	X10	S5	550	
C3M	20.0	1860-2473	20	---	X4	S5	700	
CCA	6.3	4572-6183	21	---	X10	S5	675	DUAL TRIODE. NOTE 1.
D3A	6.3	4520-7918	11	---	X10	S5	625	
D63	6.3	7200-5384	0	73	SH	S1	400	DUAL DIODE. NOTE 1.
D77	6.3	3400-7215	0	78	SH	S1	400	DUAL DIODE. NOTE 1.
D152	6.3	3400-7215	0	78	SH	S1	400	DUAL DIODE. NOTE 1.
DA90	1.4	7100-2030	0	0	SH	S1	400	
DAF91	1.4	1760-5400	13	---	X1	S5	400	PENTODE SECTION.
DAF91	1.4	1700-3000	0	15	SH	S1	400	DIODE SECTION.
DAF92	1.4	1760-2300	13	---	X1	S5	400	PENTODE SECTION.
DAF92	1.4	1700-4000	0	15	SH	S1	400	DIODE SECTION.
DC70	1.1	4510-8000	26	---	X4	S5	425	
DC90	1.4	7150-2000	16	---	X1	S5	675	
DCC90	3.0	1750-6000	35	---	X2	S5	625	TRIODE NO. 1.
DCC90	3.0	1730-2000	35	---	X2	S5	625	TRIODE NO. 2.
DCF60	1.1	4730-1205	12	---	X1	S5	300	PENTODE SECTION. NOTE 2.
DCF60	1.1	4750-6003	27	---	X1	S5	175	TRIODE SECTION. NOTE 2.
DD6	6.3	4300-7215	0	78	SH	S1	400	DUAL DIODE. NOTE 1.
DDR7	6.3	4310-5720	26	---	X4	S5	400	
DF33	1.4	7200-3400	11	---	X2	S5	225	CAP = G.
DF60	1.1	3540-1200	8	---	X1	S5	525	
DF61	1.4	3500-2041	0	0	SH	S1	300	MAKE NO GAS TEST.
DF62	1.1	3540-1200	14	---	X4	S4	225	
DF67	0.6	3540-2100	28	---	X1	S5	60	
DF91	1.4	1760-2300	0	---	X2	S4	225	
DF92	1.4	7160-2300	19	---	X2	S5	325	
DF96	1.4	7160-2300	25	---	X2	S5	175	
DF904	1.4	1760-2300	14	---	X2	S5	275	
DH63	6.3	7200-3081	15	---	X4	S5	175	TRIODE SECTION. CAP = G.
DH63	6.3	7200-5483	15	30	SH	S1	400	DUAL DIODE. NOTE 1.
DH77	6.3	4310-7020	15	---	X4	S5	175	TRIODE SECTION.
DH77	6.3	4300-6520	0	30	SH	S1	400	DUAL DIODE. NOTE 1.
DK32	1.4	7250-3400	0	---	X2	--	275	PENTODE SECTION. CAP=G.
DK32	1.4	7250-6430	24	---	X1	S5	250	HOLD DOWN S1 AND PRESS S5
DK91	1.4	1740-3062	10	---	X2	S4	425	OSC. SECTION
DL33	2.5	7250-3400	0	---	X2	--	625	NOTE 2.
DL35	1.4	7250-3400	18	---	X2	--	475	HOLD DOWN S1 AND PRESS S5.
DL36	1.4	7250-3400	0	---	X2	--	625	HOLD DOWN S1 AND PRESS S5.
DL63	6.3	2700-3080	19	---	X2	S5	625	TRIODE SECTION. CAP = G.
DL63	6.3	2700-5480	19	64	SH	S1	400	DUAL DIODE. NOTE 1.
DL66	1.4	5340-1200	32	---	X1	--	400	HOLD DOWN S1 AND PRESS S6.
DL67	1.1	3540-1200	25	---	X1	S5	250	
DL91	1.4	1730-2400	23	---	X2	S4	475	
DL92	2.5	7130-2400	23	---	X2	S4	475	
DL93	2.5	1740-2300	11	---	X2	--	600	HOLD DOWN S1 AND PRESS S5.
DL94	3.0	7160-2300	0	---	X4	--	300	HOLD DOWN S1 AND PRESS S5.
DL95	3.0	7130-2400	0	---	X4	--	300	HOLD DOWN S1 AND PRESS S5.
DL96	2.5	1760-2300	23	---	X2	S4	425	
DL98	2.5	5430-7100	50	---	X2	S5	525	
DM70	1.4	5410-8000	---	---	X2	S6	----	ADJUST BIAS TO VARY BAR LENGTH. DO NOT
DM71	1.4	5410-8000	---	---	X2	S6	----	ADJUST BIAS BELOW 30.
DM71	1.4	5410-8000	---	---	X2	S6	----	ADJUST BIAS TO VARY BAR LENGTH. DO NOT
DM71	1.4	5410-8000	---	---	X2	S6	----	ADJUST BIAS BELOW 30.
DP61	6.3	4310-5672	17	---	X2	S5	725	

TUBE TYPE	FIL.	SELECTORS	RIAS	SHUNT	MULT	PRESS	MIN. MUT. COND	NOTATIONS
DX263	2.0	1462-0300	35	---	X4	S5	625	RIGHT CAP=P. USE ADAPTER SA-6, 1050-107
DX263	2.0	1462-0300	35	---	X4	S5	625	LEFT CAP=P
DX296	12.6	5910-6720	37	---	X10	S5	300	TETRODE NO.1. USE ADAPTER SA-8, 1050-168
DX296	12.6	5930-8720	37	---	X10	S5	300	TETRODE NO. 2.
DY30	1.1	7200-0000	0	80	SH	S6	400	CAP = P.
DY51	1.4	2700-0000	0	88	SH	S6	400	CONNECT FIL. LEADS TO OCTAL SOCKET PINS 2 AND 7. SINGLE LEAD = P.
DY80	1.1	1200-0000	0	80	SH	S6	400	CAP = P.
DY86	1.4	4200-0000	0	85	SH	S6	400	CAP = P.
DY87	1.4	4200-0000	0	85	SH	S6	400	CAP = P.
DY802	1.4	1200-0000	0	86	SH	S6	400	CAP=P.
E55L	6.3	4580-1390	23	---	X10	S5	800	USE ADAPTER SA-8, 1050-168.
E80CC	12.6	4572-6183	17	---	X4	S5	425	DUAL TRIODE. NOTE 1.
E80CF	6.3	5420-6371	12	---	X4	S5	625	PENTODE SECTION.
E80CF	6.3	5490-1086	26	---	X4	S5	675	TRIODE SECTION.
E80F	6.3	5490-6138	15	---	X2	S5	575	
E80L	6.3	5420-7839	15	---	X10	S5	425	
E81CC	12.6	5472-6183	14	---	X4	S5	625	DUAL TRIODE. NOTE 1.
E81L	6.3	5420-7839	10	---	X10	S5	450	
E82CC	12.6	5472-6183	25	---	X2	S5	675	DUAL TRIODE. NOTE 1.
E83CC	12.6	5472-6183	14	---	X4	S5	200	DUAL TRIODE. NOTE 1.
E83F	6.3	5420-6139	15	---	X10	S5	425	
E84L	6.3	5420-7930	14	---	X10	S5	475	
E86C	6.3	5420-1030	14	---	X10	S5	880	
E88C	6.3	5490-8020	14	---	X20	S5	475	
E88CC	6.3	5472-6183	21	---	X10	S5	675	DUAL TRIODE. NOTE 1.
E90CC	6.3	4356-2170	25	---	X10	S5	390	DUAL TRIODE. NOTE 1.
E90F	6.3	4310-5627	10	---	X4	S5	425	
E91AA	6.3	4300-7215	0	78	SH	S1	400	DUAL DIODE. NOTE 1.
E91H	6.3	4370-5621	0	---	X2	--	375	AMPL. SECTION. HOLD DOWN S1 & PRESS S5.
E91H	6.3	4310-5627	0	---	X2	S5	375	OSC. SECTION.
E91N	6.3	4310-6025	---	94	SH	S6	650	STRIKES AT ABOUT 27. NOTE 6.
E92CC	6.3	4365-1270	15	---	X10	S5	375	DUAL TRIODE. NOTE 1.
E95F	6.3	4310-5620	10	---	X4	S5	675	
E99F	6.3	4310-5627	10	---	X2	S5	775	
E130L	6.3	7250-0480	55	---	X4	S5	600	
E180CC	12.6	5472-6183	15	---	X10	S5	400	DUAL TRIODE. NOTE 1.
E180F	6.3	5420-7918	8	---	X10	S5	600	
E182CC	12.6	5472-9163	17	---	X20	S5	500	DUAL TRIODE. NOTE 1.
E182F	6.3	9310-6840	13	---	X20	S5	300	
E186F	6.3	5420-7918	8	---	X10	S5	600	
E188CC	6.3	5472-6183	21	---	X10	S5	675	DUAL TRIODE. NOTE 1.
E235L	6.3	2750-3480	58	---	X10	S5	300	
E283CC	6.3	4590-8017	9	---	X2	S5	600	TRIODE NO. 1.
E283CC	6.3	4520-3067	9	---	X2	S5	600	TRIODE NO. 2.
E288CC	6.3	4572-6183	29	---	X20	S5	4400	DUAL TRIODE. NOTE 1.
E810F	6.3	5420-7938	12	---	X20	S5	350	
E2134	6.3	4310-5720	15	---	X10	S5	375	
EA76	6.3	1400-2030	0	81	SH	S1	400	
EA91	6.3	4300-7215	0	78	SH	S1	400	DUAL DIODE. NOTE 1.
EA901	6.3	4300-7215	0	78	SH	S1	400	DUAL DIODE. NOTE 1.
EA901S	6.3	4300-7215	0	78	SH	S1	400	DUAL DIODE. NOTE 1.
EABC80	6.3	5480-9070	15	---	X4	S5	175	TRIODE SECTION.
EABC80	6.3	5400-6070	0	35	SH	S1	400	DIODE NO. 1.
EABC80	6.3	5400-2137	0	78	SH	S1	400	DUAL DIODE. NOTE 1.
EA42	6.3	8160-2574	25	---	X2	S5	375	PENT. SECT. USE ADAPTER SA-5, 1050-129.
EA42	6.3	8100-3070	0	61	SH	S1	400	DIODE SECT. USE ADAPTER SA-5, 1050-129.
EAM86	6.3	4580-7693	45	---	X20	S4	----	SOLID BAR.
EAM86	6.3	4580-7693	78	---	X20	S4	----	SPLIT BAR.
EAM86	6.3	4500-2030	0	20	SH	S1	400	DIODE.
EB41	6.3	8100-6473	0	78	SH	S1	400	DUAL DIODE. USE ADAPTER SA-5, 1050-129. NOTE 1.
EB91	6.3	4300-7215	0	78	SH	S1	400	DUAL DIODE. NOTE 1.



TUBE TYPE	FIL.	SELECTORS	BIAS	SHUNT	MULT	PRESS	MIN. MUT. COND	NOTATIONS
EC84	6.3	8710-5020	16	---	X10	S5	625	TRIODE SECTION. CAP = G. DUAL DIODE. NOTE 1. TRIODE SECT. USE ADAPTER SA-5, 1050-129.
EBC33	6.3	2700-3080	19	---	X2	S5	625	
EBC33	6.3	2700-5440	19	64	SH	S1	400	
EBC41	6.3	8130-2070	9	---	X1	S5	800	
EBC41	6.3	8100-6570	0	27	SH	S1	400	DUAL DIODE. USE ADAPTER SA-5, 1050-129. NOTE 1.
EBC81	6.3	5420-1030	9	---	X1	S5	800	TRIODE SECTION.
EBC81	6.3	5400-8630	0	27	SH	S1	400	DUAL DIODE. NOTE 1.
EBC90	6.3	4310-7020	15	---	X4	S5	175	TRIODE SECTION.
EBC90	6.3	4300-6520	0	30	SH	S1	400	DUAL DIODE. NOTE 1.
EBC91	6.3	4310-7020	14	---	X4	S5	200	TRIODE SECTION.
EBC91	6.3	4300-6520	0	30	SH	S1	400	DUAL DIODE. NOTE 1.
EBF32	6.3	7200-3681	22	---	X2	S5	300	PENTODE SECTION. CAP = G.
EBF32	6.3	7200-5481	22	32	SH	S1	400	DUAL DIODE. NOTE 1.
EBF80	6.3	5420-6139	8	---	X4	--	350	PENTODE SECTION. HOLD DOWN S1 & PRESS S5
EBF80	6.3	5400-7839	0	30	SH	S1	400	DUAL DIODE. NOTE 1.
EBF83	6.3	5420-1639	0	44	SH	S1	650	PENTODE SECTION.
EBF83	6.3	5400-8730	0	43	SH	S1	400	DUAL DIODE. NOTE 1.
EBF89	6.3	5420-6139	14	---	X4	S5	450	PENTODE SECTION.
EBF89	6.3	5400-8730	0	60	SH	S1	400	DUAL DIODE. NOTE 1.
EC71	6.3	3610-8057	10	---	X10	S4	350	
EC80	6.3	5410-9030	10	---	X20	S5	375	
EC81	6.3	5410-8030	28	---	X4	S5	625	
EC86	6.3	5420-1030	14	---	X10	S5	880	
EC88	6.3	5490-8020	14	---	X20	S5	475	
EC90	6.3	4360-1070	25	---	X2	S5	675	
EC91	6.3	4310-7050	0	---	X10	S5	525	
EC92	6.3	4360-1070	14	---	X4	S5	625	
EC94	6.3	4320-1050	16	---	X10	S4	400	
EC95	6.3	4320-5670	11	---	X10	S5	650	
EC97	6.3	4320-5016	13	---	X10	S5	800	
EC806S	6.3	4520-1030	14	---	X10	S5	875	
EC900	6.3	4310-5076	17	---	X10	S5	475	DUAL TRIODE. NOTE 1.
EC8010	6.3	4510-8020	14	---	X20	S5	775	
ECC33	6.3	8741-5263	15	---	X4	S5	400	
ECC35	6.3	7841-5263	13	---	X4	S5	250	
ECC40	6.3	8163-5274	20	---	X4	S5	450	DUAL TRIODE. USE ADAPTER SA-5, 1050-129. NOTE 1.
ECC81	12.6	5472-6183	14	---	X4	S5	625	DUAL TRIODE. NOTE 1.
ECC82	12.6	5472-6183	25	---	X2	S5	675	DUAL TRIODE. NOTE 1.
ECC83	12.6	5472-6183	14	---	X4	S5	200	DUAL TRIODE. NOTE 1.
ECC84	6.3	5462-9371	24	---	X10	S5	375	DUAL TRIODE. NOTE 1.
ECC85	6.3	5472-6183	14	---	X4	S5	625	DUAL TRIODE. NOTE 1.
ECC86	6.3	5472-6183	19	0	SH	S1	875	DUAL TRIODE. MAKE NO GAS TEST. NOTE 1.
ECC88	6.3	5472-6183	20	---	X10	S5	775	DUAL TRIODE. NOTE 1.
ECC89	6.3	4562-9381	22	---	X10	S5	550	DUAL TRIODE. NOTE 1.
ECC91	6.3	4356-2170	25	---	X10	S5	390	DUAL TRIODE. NOTE 1.
ECC180	6.3	4572-6183	15	---	X10	S5	400	DUAL TRIODE. NOTE 1.
ECC186	12.6	5472-6183	25	---	X2	S5	675	DUAL TRIODE. NOTE 1.
ECC189	6.3	5472-6183	22	---	X10	S5	475	DUAL TRIODE. NOTE 1.
ECC230	6.3	8741-5263	55	---	X4	S4	625	DUAL TRIODE. NOTE 1.
ECC801	12.6	4572-6183	14	---	X4	S5	625	DUAL TRIODE. NOTE 1.
ECC801S	12.6	5472-6183	14	---	X4	S5	625	DUAL TRIODE. NOTE 1.
ECC802	12.6	4572-6183	25	---	X2	S5	675	DUAL TRIODE. NOTE 1.
ECC802S	12.6	5472-6183	25	---	X2	S5	675	DUAL TRIODE. NOTE 1.
ECC803	12.6	5472-6183	14	---	X4	S5	200	DUAL TRIODE. NOTE 1.
ECC803S	12.6	5472-6183	14	---	X4	S5	200	DUAL TRIODE. NOTE 1.
ECC960	6.3	4356-2170	25	---	X10	S5	390	DUAL TRIODE. NOTE 1.
ECC962	6.3	4365-1270	15	---	X10	S5	375	DUAL TRIODE. NOTE 1.
ECC2000	6.3	5680-7091	24	---	X20	S5	450	TRIODE NO. 1. USE ADAPTER SA-11, 1050-177. MODEL 752# USE SA-11 & CA-4. NOTE 7.
ECC2000	6.3	5630-A021	24	---	X20	S5	450	TRIODE NO. 2.

TUBE TYPE	FIL.	SELECTORS	RIAS	SHUNT	MULT	PRESS	MIN. MUT. COND	NOTATIONS
ECF80	6.3	5420-6371	12	---	X4	S5	675	PENTODE SECTION.
ECF80	6.3	5490-1086	26	---	X4	S5	675	TRIODE SECTION.
ECF82	6.3	5420-6370	12	---	X4	S5	475	PENTODE SECTION.
ECF82	6.3	5490-1080	10	---	X10	S5	525	TRIODE SECTION.
ECF83	6.3	5490-6780	10	---	X2	S4	470	PENTODE SECTION.
ECF83	6.3	5420-3010	32	---	X2	S4	700	TRIODE SECTION.
ECF86	6.3	5420-8930	11	---	X10	S5	525	PENTODE SECTION.
ECF86	6.3	5460-7030	33	---	X10	S5	375	TRIODE SECTION.
ECF200	6.3	5630-7824	15	---	X10	S5	375	PENTODE SECTION. USE ADAPTER SA-11, 1050-177. MODEL 752# USE SA-11 & CA-4. NOTE 7.
ECF200	6.3	56A0-9010	14	---	X4	S5	750	TRIODE SECTION.
ECF201	6.3	5630-7824	14	---	X10	S5	375	PENTODE SECTION. USE ADAPTER SA-11, 1050-177. MODFL 752# USE SA-11 & CA-4. NOTE 7.
ECF201	6.3	56A0-9010	30	---	X10	S5	300	TRIODE SECTION.
ECF801	6.3	5420-6710	10	---	X10	S5	475	PENTODE SECTION.
ECF801	6.3	5490-8030	29	---	X10	S5	550	TRIODE SECTION.
ECF802	6.3	4520-6370	14	---	X4	S5	775	PENTODE SECTION.
ECF802	6.3	4590-1080	13	---	X4	S5	550	TRIODE SECTION.
ECF804	6.3	4520-6370	15	---	X10	S5	450	PENTODE SECTION.
ECF804	6.3	4590-1080	17	---	X10	S5	500	TRIODE SECTION.
ECF805	6.3	4570-3280	12	---	X10	S5	450	PENTODE SECTION.
ECF805	6.3	4590-1080	31	---	X10	S5	375	TRIODE SECTION.
ECH35	6.3	7200-3485	10	---	X2	S5	500	HEXODE SECTION. CAP = G.
ECH35	6.3	7250-6084	15	---	X4	S5	475	TRIODE SECTION.
ECH42	6.3	8160-2574	19	---	X2	S5	400	HEXODE SECT. USE ADAPTER SA-5, 1050-129.
ECH42	6.3	8160-3076	27	---	X2	S5	475	TRIODE SECT. USE ADAPTER SA-5, 1050-129.
ECH81	6.3	5420-6137	15	---	X2	S5	475	HEPTODE SECTION.
ECH81	6.3	5490-8032	20	---	X4	S5	475	TRIODE SECTION.
ECH83	6.3	5470-1632	23	---	X1	S1	600	HEPTODE SECTION. MAKE NO GAS TEST.
ECH83	6.3	5490-8030	7	---	X2	S1	300	TRIODE SECTION. MAKE NO GAS TEST.
ECH84	6.3	5420-6731	12	---	X1	--	730	HEPTODE SECT. HOLD DOWN S1 & PRESS S5.
ECH84	6.3	5490-8030	11	---	X4	S4	400	TRIODE SECTION.
ECH200	6.3	5630-7412	15	---	X1	--	700	HEPTODE SECT. HOLD DOWN S1 & PRESS S5. USE ADAPTER SA-11, 1050-177. MODEL 752# USE SA-11 & CA-4. NOTE 7.
ECH200	6.3	5680-A090	23	---	X4	S5	650	TRIODE SECTION.
ECL80	6.3	5490-6837	21	---	X4	S5	500	PENTODE SECTION.
ECL80	6.3	5420-1030	25	---	X2	S5	425	TRIODE SECTION.
ECL82	6.3	5430-6720	26	---	X4	S5	625	PENTODE SECTION.
ECL82	6.3	5410-9080	0	---	X2	S5	775	TRIODE SECTION.
ECL83	6.3	4590-6870	25	---	X10	S5	300	PENTODE SECTION.
ECL83	6.3	4520-1030	15	---	X1	S5	450	TRIODE SECTION.
ECL84	6.3	5480-6970	10	---	X10	S5	630	PENTODE SECTION.
ECL84	6.3	5410-2030	12	---	X4	S5	630	TRIODE SECTION.
ECL85	6.3	5490-6780	36	---	X10	S5	380	PENTODE SECTION.
ECL85	6.3	5420-1030	23	---	X2	S5	960	TRIODE SECTION.
ECL86	6.3	5480-6370	11	---	X10	S5	500	PENTODE SECTION.
ECL86	6.3	5410-9020	10	---	X2	S5	325	TRIODE SECTION.
ECLL800	6.3	4526-3970	15	---	X4	S5	775	PENTODE NO. 1.
ECLL800	6.3	4562-8970	15	---	X4	S5	775	PENTODE NO. 2.
ECLL800	6.3	4526-1070	0	---	X1	S5	100	TRIODE SECTION.
ED500	6.3	4500-8010	0	65	SH	S1	500	CAP = G. USE ADAPTER SA-8, 1050-168.
EF22	6.3	8160-2374	23	---	X04	S5	275	
EF40	6.3	8150-2674	10	---	X2	S5	600	USE ADAPTER SA-5, 1050-129.
EF41	6.3	8160-2570	21	---	X2	S5	475	USE ADAPTER SA-5, 1050-129.
EF42	6.3	8160-2574	10	---	X4	S5	725	USE ADAPTER SA-5, 1050-129.
EF71	6.3	6310-5740	13	---	X4	S5	475	
EF80	6.3	5420-7819	10	---	X10	S5	400	
EF85	6.3	5420-7819	17	---	X4	S5	550	
EF86	6.3	5490-6138	11	---	X4	S5	300	
EF89	6.3	5420-7839	12	---	X4	S5	475	
EF91	6.3	4310-5726	11	---	X10	S5	300	



TUBE TYPE	FIL.	SELECTORS	BIAS	SHUNT	MULT	PRESS	MIN. MUT. COND	NOTATIONS
EF92	6.3	4310-5726	15	---	X4	S5	225	MAKE NO GAS TEST.
EF93	6.3	4310-5672	0	---	X4	S5	500	
EF94	6.3	4310-5672	10	---	X4	S5	475	
EF95	6.3	4310-5620	10	---	X4	S5	675	
EF96	6.3	4310-5620	10	---	X4	S5	625	
EF97	6.3	4370-6523	0	---	X1	S1	500	
EF98	6.3	4310-6527	0	73	SH	S1	650	
EF183	6.3	5420-7819	17	---	X4	S5	650	
EF184	6.3	5420-7819	10	---	X10	S5	500	
EF731	6.3	6310-5740	13	---	X4	S5	475	
EF732	6.3	6310-5740	16	---	X4	S5	475	PENTODE NO. 1. USE ADAPTER SA-11, 1050-177. MODEL 752# USE ADAPTER SA-4 & CA-4. NOTE 7. PENTODE NO. 2. GRID NO. 1. GRID NO. 3.
EF800	6.3	5420-7819	10	---	X10	S5	400	
EF804	6.3	5490-7831	11	---	X4	S5	300	
EF804S	6.3	5490-7831	11	---	X4	S5	300	
EF805S	6.3	5420-7819	17	---	X4	S5	550	
EF806S	6.3	4590-6138	11	---	X4	S5	300	
EF861	6.3	5420-7918	8	---	X10	S5	600	
EF905	6.3	4310-5620	10	---	X4	S5	675	
EFL200	6.3	5680-A970	16	---	X10	S5	650	
EFL200	6.3	5610-4320	12	---	X10	S5	450	AMPL. SECTION. HOLD DOWN S1 AND PRESS S5 OSC. SECTION AMPL. SECTION. HOLD DOWN S1 & PRESS S5. OSC. SECTION.
EH90	6.3	4310-5627	16	---	X1	S5	300	
EH90	6.3	4370-5621	0	---	X1	S5	775	
EH900S	6.3	4370-5621	0	---	X2	--	475	
EH900S	6.3	4310-5627	0	---	X2	S5	475	
EK90	6.3	4370-5621	0	---	X2	--	250	
EK90	6.3	4310-6027	20	---	X10	S5	400	
EL33	6.3	7250-3480	13	---	X10	S5	400	
EL34	6.3	7250-3481	23	---	X10	S5	375	
EL36	6.3	7250-0480	32	---	X10	S5	450	CAP = P.
EL37	6.3	7250-3481	17	---	X10	S5	300	CAP = P. USE ADAPTER SA-5, 1050-129.
EL38	6.3	7250-0481	0	---	X10	S5	700	
EL41	6.3	8160-2570	10	---	X10	S5	600	
EL42	6.3	8160-2570	17	---	X4	S5	500	USE ADAPTER SA-5, 1050-129.
EL80	6.3	4520-7130	10	---	X10	S5	600	CAP = P.
EL81	6.3	5420-0731	51	---	X10	S5	275	
EL83	6.3	5420-7136	0	---	X10	S5	550	
EL84	6.3	5420-7930	14	---	X10	S5	475	CAP = P. USE ADAPTER SA-8, 1050-168. USE ADAPTER SA-8, 1050-168. CAP = P. USE ADAPTER SA-8, 1050-168. USE ADAPTER SA-8, 1050-168. CAP=P. USE HICKOK ADAPTER SA-8, 1050-168
EL85	6.3	5420-7938	17	---	X4	S5	500	
EL86	6.3	5420-7930	16	---	X10	S5	475	
EL90	6.3	4310-5620	18	---	X4	S5	575	
EL91	6.3	4310-5720	26	---	X4	S5	400	
EL95	6.3	3410-5620	10	---	X4	S5	600	
EL180	12.6	4520-7813	0	---	X10	S5	500	
EL360	6.3	7250-0480	32	---	X10	S5	450	
EL500	6.3	4520-0780	73	---	X4	S5	400	
EL503	6.3	4530-9860	33	---	X10	S5	650	
EL505	6.3	4510-0392	90	---	X10	S5	475	PENTODE NO. 1. PENTODE NO. 2. CONNECT A 1 MEGOHM RESISTOR FROM PLATE JACK TO PIN 3 OF LARGE 7 PIN SOCKET. CONNECT A SECOND 1 MEGOHM RESISTOR FROM PLATE JACK TO PIN 6 OF LARGE 7 PIN SOCKET. EYE ONE CLOSSES AT BIAS OF ABOUT 35. EYE TWO CLOSSES AT BIAS OF ABOUT 68. BIAS = VARY.
EL508	6.3	4510-6370	40	---	X10	S5	475	
EL509	6.3	4510-0392	90	---	X10	S5	475	
EL803	6.3	5420-7136	0	---	X10	S5	550	
EL821	6.3	5420-7839	0	---	X10	S5	600	
EL822	6.3	5420-7839	0	---	X10	S5	600	
ELL80	6.3	5420-3170	14	---	X4	S5	770	
ELL80	6.3	5460-8970	14	---	X4	S5	770	
EM34	6.3	7240-5080	---	100	SH	S6	----	

TUBE TYPE	FIL.	SELECTORS	BIAS	SHUNT	MULT	PRESS	MIN. MUT. COND	NOTATIONS
EM80	6.3	5410-9020	---	100	SH	S6	----	CONNECT A 1 MEGOHM RESISTOR FROM PLATE JACK TO OCTAL TEST SOCKET PIN 7. VARY BIAS TO VARY BEAM ANGLE.
EM81	6.3	5410-9020	---	100	SH	S6	----	CONNECT A 1 MEGOHM RESISTOR FROM PLATE JACK TO OCTAL TEST SOCKET PIN 7. VARY BIAS TO VARY BEAM ANGLE.
EM84	6.3	5410-6030	45	---	X20	S5	----	SOLID BAR. (SEE BELOW).
EM84	6.3	5410-6030	0	---	X20	S5	----	SPLIT BAR. JUMPER NOVAL SOCKET PINS 7&9. CONNECT A 470K OHM, 1/2 WATT, 10% RESISTOR FROM THIS JUMPER TO PIN 6.
EM87	6.3	5410-6030	34	---	X20	S5	----	SOLID BAR. (SEE BELOW).
EM87	6.3	5410-6030	0	---	X20	S5	----	SPLIT BAR. JUMPER NOVAL SOCKET PINS 7&9. CONNECT A 100K OHM, 1/2 WATT, 10% RESISTOR FROM THIS JUMPER TO PIN 6.
EMM801	6.3	4590-2031	45	---	X20	S5	----	SOLID BAR. (SEE BELOW).
EMM801	6.3	4590-2031	20	---	X20	S5	----	SPLIT BAR. CONNECT A 390K OHM, 1/2 WATT, 10% RESISTOR BETWEEN PINS 2 & 8 OF THE OCTAL TEST SOCKET.
EMM801	6.3	4570-2031	45	---	X20	S5	----	SOLID BAR. (SEE BELOW).
EMM801	6.3	4570-2031	20	---	X20	S5	----	SPLIT BAR. CONNECT A 390K OHM, 1/2 WATT, 10% RESISTOR BETWEEN PINS 2 & 6 OF THE OCTAL TEST SOCKET.
EMM803	6.3	4530-6010	40	---	X20	S5	----	LARGE SOLID BAR. (SEE BELOW).
EMM803	6.3	4530-6010	0	---	X20	S5	----	SPLIT BAR. CONNECT A 470K OHM, 1/2 WATT, 10% RESISTOR BETWEEN PINS 6 & 9 OF THE NOVAL TEST SOCKET.
EMM803	6.3	4520-6010	25	---	X20	S5	----	SMALL SOLID BAR. (SEE BELOW).
EMM803	6.3	4520-6010	0	---	X20	S5	----	NO BAR. CONNECT A 1 MEGOHM, 1/2 WATT, 10% RESISTOR BETWEEN PINS 6 AND 7 OF THE OCTAL TEST SOCKET.
EN91	6.3	4310-6025	---	93	SH	S6	650	STRIKES AT ABOUT 26. NOTE 6.
EQ80	6.3	5470-1639	29	---	X2	S5	300	
EY80	6.3	5400-9030	0	55	SH	S3	650	
EY81	6.3	5400-0090	0	50	SH	--	650	CAP = P. SHORT ON 1-2-3-4. HOLD DOWN S7 AND PRESS S3.
EY82	6.3	5400-9030	0	50	SH	S3	525	
EY84	6.3	5400-0030	0	41	SH	S3	650	CAP = P.
EY86	6.3	4200-0000	0	85	SH	S6	400	CAP = P.
EY87	6.3	4200-0000	0	85	SH	S6	400	CAP = P.
EY88	6.3	5400-9000	0	56	SH	S3	800	CONNECT CAP TO EXT. SELF BIAS RES. JACKS MODEL 752A# CAP=K
EY91	6.3	4300-1020	0	18	SH	S3	650	
EY500	6.3	4500-7010	0	80	SH	S3	350	CONNECT CAP TO PIN 1 OF THE OCTAL SOCKET USE ADAPTER SA-8, 1050-168.
EZ2	6.3	7200-5381	0	20	SH	S3	650	DUAL DIODE. NOTE 1
EZ35	6.3	7200-5381	0	20	SH	S3	650	DUAL DIODE. NOTE 1.
EZ40	6.3	8100-6270	0	0	SH	S3	650	DUAL DIODE. USE ADAPTER SA-5, 1050-129. NOTE 1.
EZ80	6.3	5400-7130	0	0	SH	S3	650	DUAL DIODE. NOTE 1.
EZ81	6.3	5400-7130	0	42	SH	S3	650	DUAL DIODE. NOTE 1.
EZ90	6.3	4300-6170	0	18	SH	S3	650	DUAL DIODE. NOTE 1.
GY501	3.0	8100-0000	0	90	SH	S6	400	CAP = P. USE ADAPTER SA-8, 1050-168.
GZ30	5.0	8200-6400	0	57	SH	S3	650	DUAL DIODE. NOTE 1.
GZ32	5.0	8200-6400	0	55	SH	S3	650	DUAL DIODE. NOTE 1.
GZ33	5.0	8200-6400	0	62	SH	S3	800	DUAL DIODE. NOTE 1.
GZ34	5.0	8200-6400	0	68	SH	S3	650	DUAL DIODE. NOTE 1.
H63	6.3	7200-4081	12	---	X4	S5	225	CAP = G.
H-1112	2.0	3140-0280	10	---	X10	--	450	CAP = P. HOLD DOWN S1 & PRESS S5. USE ADAPTER SA-3, 1050-127.
1208	6.3	3140-2080	15	---	X10	S4	600	FOR MODEL 752A# USE SELECTORS AC40-0280. SAME AS ABOVE - NO ADAPTER REQUIRED. USE ADAPTER SA-3, 1050-127 OR CA-4, 1050-135. NOTE 7.
HAA91	12.6	4300-7215	0	78	SH	S1	400	DUAL DIODE. NOTE 1.
HABC80	20.0	5480-9070	15	---	X4	S5	175	TRIODE SECTION.
HABC80	20.0	5400-6070	0	35	SH	S1	400	DIODE NO. 1.

SEE NEXT PAGE FOR CONTINUATION



TUBE TYPE	FIL.	SELECTORS	BIAS	SHUNT	MULT	PRESS	MIN. MUT. COND	NOTATIONS
HABC80	20.0	5400-2137	0	79	SH	S1	400	DUAL DIODE. NOTE 1.
HBC90	12.6	4310-7020	15	---	X4	S5	175	TRIODE SECTION.
HBC90	12.6	4300-6520	0	30	SH	S1	400	DUAL DIODE. NOTE 1.
HBC91	12.6	4310-7025	14	---	X4	S5	200	TRIODE SECTION.
HBC91	12.6	4300-6527	0	30	SH	S1	400	DUAL DIODE. NOTE 1.
HCC85	17.0	5472-6183	14	---	X10	S5	375	DUAL TRIODE. NOTE 1.
HCH81	12.6	5420-6137	15	---	X2	S5	475	HEPTODE SECTION.
HCH81	12.6	5490-8032	20	---	X4	S5	475	TRIODE SECTION.
HCL82	35.0	4530-6720	26	---	X4	S5	625	PENTODE SECTION.
HCL82	35.0	4510-9080	0	---	X2	S5	775	TRIODE SECTION.
HD14	1.4	7200-3000	0	---	X1	S5	175	TRIODE SECTION. CAP = G.
HD14	1.4	7200-5000	0	0	SH	S1	400	DIODE SECTION.
HD30	2.5	5430-7100	50	---	X2	S5	525	
HD93	1.1	2100-0000	0	80	SH	S6	400	CAP = P.
HD94	6.3	7250-0480	28	---	X10	S4	350	CAP = P.
HD96	25.0	7250-0480	28	---	X10	S4	350	CAP = P.
HF61	6.3	8160-2570	21	---	X2	S5	475	USE ADAPTER SA-5, 1050-129.
HF62	6.3	8160-2574	10	---	X4	S5	725	USE ADAPTER SA-5, 1050-129.
HF93	12.6	4310-5672	0	---	X4	S5	500	
HF94	12.6	4310-5672	10	---	X4	S5	475	
HK90	12.6	4370-5621	0	---	X2	--	250	AMPL. SECTION. HOLD DOWN S1 & PRESS S5.
HK90	12.6	4310-6027	20	---	X10	S5	400	OSC. SECTION.
HL90	20.0	4310-5620	18	---	X4	S5	575	
HL92	50.0	4320-7610	13	---	X10	--	475	HOLD DOWN S1 AND PRESS S5.
HL94	35.0	9450-7610	16	---	X10	S5	475	BEFORE PLACING TUBE IN SOCKET JUMPER A 33 OHM, 2 WATT RESISTOR BETWEEN PINS 3&9 ON THE 9-PIN MIN. SOCKET COUNTING COUNTER CLOCKWISE.
HMO4	6.3	4370-5621	0	---	X2	--	250	AMPL. SECTION. HOLD DOWN S1 & PRESS S5.
HMO4	6.3	4310-6027	20	---	X10	S5	400	OSCILLATOR SECTION.
HP6	6.3	4310-5726	11	---	X10	S5	300	
HY90	35.0	4300-5070	0	50	SH	S3	650	
HZ90	12.6	4300-6170	0	18	SH	S3	650	DUAL DIODE. NOTE 1.
KT61	6.3	7250-3480	10	---	X10	S5	450	
KT66	6.3	7250-3481	17	---	X10	S5	300	
KT88	6.3	7250-3481	13	---	X20	S5	225	
KTZ63	6.3	7200-3485	21	---	X2	S5	375	CAP = G.
L63	6.3	7350-3080	23	---	X4	S5	400	
L77	6.3	4360-1070	25	---	X2	S5	675	
LC900	2.5	4310-5076	17	---	X10	S5	475	
LCF80	6.3	4520-6371	12	---	X4	S5	625	PENTODE SECTION.
LCF80	6.3	4590-1086	26	---	X4	S5	675	TRIODE SECTION.
LCF200	6.3	5630-7824	15	---	X10	S5	375	PENTODE SECTION. USE ADAPTER SA-11, 1050-177. MODEL 752# USE SA-11 & CA-4. NOTE 7.
LCF200	6.3	56A0-9010	14	---	X4	S5	750	TRIODE SECTION.
LCF201	6.3	5630-7824	14	---	X10	S5	375	PENTODE SECTION. USE ADAPTER SA-11, 1050-177. MODEL 752# USE SA-11 & CA-4. NOTE 7.
LCF201	6.3	56A0-9010	30	---	X10	S5	300	TRIODE SECTION.
LCF801	5.0	5420-6710	10	---	X10	S5	475	PENTODE SECTION.
LCF801	5.0	5490-8030	29	---	X10	S5	550	TRIODE SECTION.
LCF802	6.3	4520-6370	14	---	X4	S5	775	PENTODE SECTION.
LCF802	6.3	4590-1080	13	---	X4	S5	550	TRIODE SECTION.
LCH200	5.0	5630-7412	15	---	X1	--	700	HEPTODE SECTION. HOLD DOWN S1 & PRESS S5 USE ADAPTER SA-11, 1050-177. MODEL 752# USE SA-11 & CA-4. NOTE 7.
LCH200	5.0	5680-A090	23	---	X4	S5	650	TRIODE SECTION.
LCL80	4.3	5420-1030	25	---	X2	S5	425	TRIODE SECTION.
LCL80	4.3	5490-6837	21	---	X4	S5	500	PENTODE SECTION
LCL82	10.0	4530-6720	26	---	X4	S5	625	PENTODE SECTION.
LCL82	10.0	4510-9080	0	---	X2	S5	775	TRIODE SECTION.
LCL84	10.0	4580-6970	10	---	X10	S5	625	PENTODE SECTION.
LCL84	10.0	4510-2030	12	---	X4	S5	625	TRIODE SECTION.

TUBE TYPE	FIL.	SELECTORS	BIAS	SHUNT	MULT	PRESS	MIN. MUT. COND	NOTATIONS
LCL85	10.0	4520-1030	23	---	X2	S5	950	TRIODE SECTION.
LCL85	10.0	4590-6780	36	---	X10	S5	375	PENTODE SECTION
LFL200	10.0	5680-A970	16	---	X10	S5	650	PENTODE NO. 1. USE ADAPTER SA-11, 1050-177. MODEL 752# USE SA-11 & CA-4. NOTE 7.
LFL200	10.0	5610-4320	12	---	X10	S5	450	PENTODE NO. 2.
LL86	10.0	4520-7930	16	---	X10	S5	475	
LL500	20.0	4520-0780	73	---	X4	S5	400	CAP = P. USE ADAPTER SA-8, 1050-168.
LL505	25.0	4510-0392	90	---	X10	S5	475	CAP = P. USE ADAPTER SA-8, 1050-168.
LL521	20.0	4580-0392	30	---	X10	S4	750	CAP = P. USE ADAPTER SA-8, 1050-168.
LN119	50.0	5430-6720	26	---	X4	S5	625	PENTODE SECTION.
LN119	50.0	5410-9080	0	---	X2	S5	775	TRIODE SECTION.
LN152	6.3	5490-6837	21	---	X4	S5	500	PENTODE SECTION.
LN152	6.3	5420-1030	25	---	X2	S5	425	TRIODE SECTION.
LN309	12.6	4590-6870	25	---	X10	S5	300	PENTODE SECTION.
LN309	12.6	4520-1030	15	---	X1	S5	450	TRIODE SECTION.
LY81	6.3	4500-0090	0	50	SH	--	650	CAP=P. SHORT ON 1-2-3-4. HOLD DOWN S7 AND PRESS S3
LY88	20.0	4500-9000	0	56	SH	S3	800	CONNECT CAP TO EXT. SELF BIAS RES. JACKS MODEL 752A# CAP=K
LY500	25.0	4500-7010	0	80	SH	S3	350	CONNECT CAP TO PIN 1 OF OCTAL SOCKET. USE ADAPTER SA-8, 1050-168.
LZ319	10.0	5420-6371	12	---	X4	S5	625	PENTODE SECTION
LZ319	10.0	5490-1086	26	---	X4	S5	675	TRIODE SECTION
M8079	6.3	4300-7215	0	78	SH	S1	400	DUAL DIODE. NOTE 1.
M8081	6.3	4356-2170	17	---	X10	S5	325	DUAL TRIODE. NOTE 1.
M8083	6.3	4310-5726	11	---	X10	S5	300	
M8098	OFF	0000-1020	---	---	VR	S9	85V	125V. REGULATION = 3V. FROM 1 TO 10 MA. NOTES 3 & 4.
M8100	6.3	4310-5620	10	---	X4	S5	675	
M8136	12.6	5472-6183	25	---	X2	S5	675	DUAL TRIODE. NOTE 1.
M8137	12.6	5472-6183	14	---	X4	S5	200	DUAL TRIODE. NOTE 1.
M8162	12.6	5472-6183	14	---	X4	S5	625	DUAL TRIODE. NOTE 1.
M8195	6.3	5490-6138	11	---	X4	S5	300	
M8196	6.3	4310-5627	0	---	X2	S5	550	
M8212	6.3	4300-7215	0	78	SH	S1	400	DUAL DIODE. NOTE 1.
N14	1.4	7250-3400	18	---	X2	--	475	HOLD DOWN S1 AND PRESS S5
N17	2.5	7130-2400	23	---	X2	S4	475	
N18	3.0	7130-2400	0	---	X4	--	300	HOLD DOWN S1 AND PRESS S5.
N19	3.0	7160-2300	0	---	X4	--	300	HOLD DOWN S1 AND PRESS S5.
N22LL	20.0	4570-9632	34	---	X4	S5	200	USE ADAPTER SA-8, 1050-168.
N30EL	6.3	1C50-0324	77	---	X4	S5	750	CAP=P. NOTE 7
N77	6.3	4310-5720	26	---	X4	S5	400	
N78	6.3	4310-5720	10	---	X10	S5	500	
N119	50.0	4520-7930	16	---	X10	S5	475	
N144	6.3	4310-5720	26	---	X4	S5	400	
N151	6.3	8160-2570	17	---	X4	S5	500	USE ADAPTER SA-5, 1050-129.
N152	20.0	5420-0839	42	---	X10	S5	375	CAP = P.
N153	12.6	5420-7136	8	---	X10	S5	475	
N154	17.0	5420-7930	23	---	X10	S5	350	
N309	12.6	5420-7136	8	---	X10	S5	475	
N329	17.0	5420-7930	23	---	X10	S5	350	
N359	20.0	5420-0839	42	---	X10	S5	375	CAP = P.
N709	6.3	5420-7930	14	---	X10	S5	475	
N727	6.3	4310-5620	18	---	X4	S5	575	
OM4	6.3	7200-3080	19	---	X2	S5	625	TRIODE SECTION. CAP = G.
OM4	6.3	7200-5480	19	64	SH	S1	400	DUAL DIODE. NOTE 1.
PABC80	10.0	5480-9070	15	---	X4	S5	175	TRIODE SECTION.
PABC80	10.0	5400-6070	0	35	SH	S1	400	DIODE NO. 1.
PABC80	10.0	5400-2137	0	78	SH	S1	400	DUAL DIODE. NOTE 1.
PC86	4.3	5420-1030	14	---	X10	S5	875	
PC88	4.3	5490-8020	14	---	X20	S5	475	
PC95	3.0	4320-5670	11	---	X10	S5	650	
PC97	4.3	4320-5016	13	---	X10	S5	800	



TUBE TYPE	FIL.	SELECTORS	BIAS	SHUNT	MULT	PRESS	MIN. MUT. COND	NOTATIONS
PC900	4.3	4310-5076	17	---	X10	S5	475	
PCC84	7.5	5462-9371	24	---	X10	S5	375	DUAL TRIODE. NOTE 1.
PCC85	10.0	5472-6183	14	---	X4	S5	625	DUAL TRIODE. NOTE 1.
PCC88	7.5	5472-6183	20	---	X10	S5	775	DUAL TRIODE. NOTE 1.
PCC89	7.5	4562-9381	22	---	X10	S5	550	DUAL TRIODE. NOTE 1.
PCC189	7.5	5472-6183	22	---	X10	S5	475	DUAL TRIODE. NOTE 1.
PCF80	10.0	5420-6371	12	---	X4	S5	625	PENTODE SECTION.
PCF80	10.0	5490-1086	26	---	X4	S5	675	TRIODE SECTION.
PCF82	10.0	5420-6370	12	---	X4	S5	475	PENTODE SECTION.
PCF82	10.0	5490-1080	10	---	X10	S5	525	TRIODE SECTION.
PCF86	7.5	5420-8930	11	---	X10	S5	525	PENTODE SECTION.
PCF86	7.5	5460-7030	33	---	X10	S5	380	TRIODE SECTION.
PCF200	7.5	5630-7824	15	---	X10	S5	375	PENTODE SECTION. USE ADAPTER SA-11, 1050-177. MODEL 752# USE SA-11 & CA-4. NOTE 7.
PCF200	7.5	56A0-9010	14	---	X4	S5	750	TRIODE SECTION.
PCF201	7.5	5630-7824	14	---	X10	S5	375	PENTODE SECTION. USE ADAPTER SA-11, 1050-177. MODEL 752# USE SA-11 & CA-4. NOTE 7.
PCF201	7.5	56A0-9010	30	---	X10	S5	300	TRIODE SECTION.
PCF801	7.5	5420-6710	10	---	X10	S5	475	PENTODE SECTION.
PCF801	7.5	5490-8030	29	---	X10	S5	550	TRIODE SECTION.
PCF802	10.0	4520-6370	14	---	X4	S5	775	PENTODE SECTION.
PCF802	10.0	4590-1080	13	---	X4	S5	550	TRIODE SECTION.
PCF805	7.5	4570-3280	12	---	X10	S5	450	PENTODE SECTION.
PCF805	7.5	4590-1080	31	---	X10	S5	375	TRIODE SECTION.
PCH200	10.0	5630-7412	15	---	X1	--	700	HEPTODE SECTION. HOLD DOWN S1 & PRESS S5 USE ADAPTER SA-11, 1050-177. MODEL 752A# USE SA-11 & CA-4. NOTE 7.
PCH200	10.0	5680-A090	23	---	X4	S5	650	TRIODE SECTION.
PCL82	17.0	5430-6720	26	---	X4	S5	625	PENTODE SECTION.
PCL82	17.0	5410-9080	0	---	X2	S5	775	TRIODE SECTION.
PCL83	12.6	4590-6870	25	---	X10	S5	300	PENTODE SECTION.
PCL83	12.6	4520-1030	15	---	X1	S5	450	TRIODE SECTION.
PCL84	17.0	5480-6970	10	---	X10	S5	630	PENTODE SECTION.
PCL84	17.0	5410-2030	12	---	X4	S5	630	TRIODE SECTION.
PCL85	17.0	5490-6780	36	---	X10	S5	380	PENTODE SECTION.
PCL85	17.0	5420-1030	23	---	X2	S5	960	TRIODE SECTION.
PCL86	12.6	5480-6370	11	---	X10	S5	500	PENTODE SECTION.
PCL86	12.6	5410-9020	10	---	X2	S5	325	TRIODE SECTION.
PD500	7.5	4500-8010	0	65	SH	S1	500	CAP = G. USE ADAPTER SA-8, 1050-168.
PF86	4.3	5490-6138	11	---	X4	S5	300	
PFL200	17.0	5680-A970	16	---	X10	S5	650	PENTODE NO. 1. USE ADAPTER SA-11, 1050-177. MODEL 752A# USE SA-11.
PFL200	17.0	5610-4320	12	---	X10	S5	450	PENTODE NO. 2.
PL2D21	6.3	4310-6025	0	93	SH	S6	650	STRIKES AT ABOUT 26. NOTE 6
PL21	6.3	4310-6025	---	93	SH	S6	650	STRIKES ABOUT 26. NOTE 6.
PL36	25.0	7250-0480	32	---	X10	S5	450	CAP = P.
PL81	20.0	5420-0839	42	---	X10	S5	375	CAP = P.
PL82	17.0	5420-7930	23	---	X10	S5	350	
PL83	12.6	4520-7136	8	---	X10	S5	475	
PL84	17.0	5420-7930	30	---	X10	S5	475	HOLD DOWN ' LIFE TEST ' BUTTON.
PL500	25.0	4520-0780	73	---	X4	S5	400	CAP = P. USE ADAPTER SA-8, 1050-168.
PL505	35.0	4510-0392	90	---	X10	S5	475	CAP = P. USE ADAPTER SA-8, 1050-168.
PL508	17.0	4510-6370	40	---	X10	S5	475	USE ADAPTER SA-8, 1050-168.
PL521	25.0	4580-0392	30	---	X10	S4	750	CAP = P. USE ADAPTER SA-8, 1050-168.
PLL80	12.6	5420-3170	14	---	X4	S5	770	PENTODE NO. 1.
PLL80	12.6	5460-8970	14	---	X4	S5	770	PENTODE NO. 2.
PM04	6.3	4310-5672	0	---	X4	S5	500	
PM05	6.3	4310-5620	10	---	X4	S5	675	
PM07	6.3	4310-5726	11	---	X10	S5	300	
PM84	4.3	5410-6030	45	---	X20	S5	----	SOLID BAR (SEE BELOW)
PM84	4.3	5410-6030	0	---	X20	S5	----	SPLIT BAR. JUMPER NOVAL SOCKET PINS 7&9. CONNECT A 470K OHM 1/2 WATT 100/0 RESISTOR FROM THIS JUMPER TO PIN 6

TUBE TYPE	FIL.	SELECTORS	BIAS	SHUNT	MULT	PRESS	MIN. MUT. COND	NOTATIONS
PY80	20.0	5400-9030	0	50	SH	S3	650	
PY81	17.0	5400-0090	0	50	SH	--	650	CAP = P. SHORT ON 1-2-3-4. HOLD DOWN S7 AND PRESS S3.
PY82	20.0	5400-9030	0	50	SH	S3	650	
PY88	25.0	5400-9000	0	56	SH	S3	800	CONNECT CAP TO EXT. SELF BIAS RES. JACKS MODEL 752A# CAP=K.
PY500	50.0	4500-7010	0	80	SH	S3	350	CONNECT CAP TO PIN 1 OF OCTAL SOCKET. USE ADAPTER SA-8, 1050-168.
PY800	19.0	5400-0090	0	50	SH	--	650	CAP = P. SHORT ON 1-2-3-4. HOLD DOWN S7 AND PRESS S3.
QA2403	6.3	4310-5726	11	---	X10	S5	300	
QA2406	12.6	5472-6183	14	---	X4	S5	625	DUAL TRIODE. NOTE 1.
QE03/10	6.3	4590-1673	0	---	X10	S5	425	
QE05/40	6.3	7250-0318	12	---	X10	S4	425	CAP = P.
QE05/40F	12.6	7250-0318	12	---	X10	S4	425	CAP = P.
QE05/40H	25.0	7250-0318	12	---	X10	S4	425	CAP = P.
QE06/50	6.3	5130-0240	28	---	X4	S5	600	CAP = P.
QQE02/5	12.6	5431-8720	12	---	X10	S5	425	TETRODE NO. 1.
QQE02/5	12.6	5413-6720	12	---	X10	S5	425	TETRODE NO. 2.
QQE03/12	12.6	5431-8720	13	---	X4	S5	500	TETRODE NO. 1.
QQE03/12	12.6	5413-6720	13	---	X4	S5	500	TETRODE NO. 2.
QQE03/20	12.6	7162-0340	29	---	X2	S5	775	RIGHT CAP=P. USE ADAPTER SA-6, 1050-107.
QQE03/20	12.6	7126-0340	29	---	X2	S5	775	LEFT CAP = P.
QQE06/40	12.6	7162-0340	35	---	X4	S5	625	RIGHT CAP=P. USE ADAPTER SA-6, 1050-107.
QQE06/40	12.6	7126-0340	35	---	X4	S5	625	LEFT CAP = P.
QQV02/6	12.6	5431-8720	12	---	X10	S5	425	TETRODE NO. 1.
QQV02/6	12.6	5413-6720	12	---	X10	S5	425	TETRODE NO. 2.
QQV03/10	12.6	5431-8720	13	---	X4	S5	500	TETRODE NO. 1.
QQV03/10	12.6	5413-6720	13	---	X4	S5	500	TETRODE NO. 2.
QQV03/20A	12.6	7162-0340	29	---	X2	S5	775	RIGHT CAP=P. USE ADAPTER SA-6, 1050-107.
QQV03/20A	12.6	7126-0340	29	---	X2	S5	775	LEFT CAP = P.
QQV06/40	12.6	1762-0340	35	---	X4	S5	625	RIGHT CAP=P. USE ADAPTER SA-6, 1050-107.
QQV06/40	12.6	1726-0340	35	---	X4	S5	625	LEFT CAP = P.
QS95/10	OFF	0000-5010	---	---	VR	S9	95V	NOTES 3&4. 110V. FROM 2 TO 10MA. REGULA- TION = 5V. CONNECT A 470K OHM RESISTOR BETWEEN PINS 1 AND 4 ON ANY SOCKET.
QV05/25	6.3	5130-0240	28	---	X4	S5	600	CAP = P.
STV-85/10	OFF	0000-1020	---	---	VR	S9	85V	NOTES 3&4. 125V. FROM 1 TO 10MA. REG.=3V
STV-108/30	OFF	0000-5020	---	---	VR	S9	108V	NOTES 3&4. 115V FROM 5 TO 30MA. REG.=2V.
STV-150/30	OFF	0000-5020	---	---	VR	S9	150V	NOTES 3&4. 155V FROM 5 TO 30MA. REG.=2V.
U26	6.3	4200-0000	0	85	SH	S6	400	CAP = P.
U49	6.3	4200-0000	0	85	SH	S6	400	CAP = P.
U50	5.0	8200-6000	0	36	SH	S3	400	PLATE NO. 1
U50	5.0	8200-4000	0	36	SH	S3	400	PLATE NO. 2
U52	5.0	8200-6000	0	35	SH	S3	650	PLATE NO. 1.
U52	5.0	8200-4000	0	30	SH	S3	650	PLATE NO. 2.
U70	6.3	7200-5381	0	20	SH	S3	650	DUAL DIODE. NOTE 1.
U78	6.3	4300-6170	0	18	SH	S3	650	DUAL DIODE. NOTE 1.
U119	35.0	5400-9030	0	55	SH	S3	800	
U149	6.3	8100-6370	0	20	SH	S3	650	DUAL DIODE. NOTE 1
U152	20.0	5400-9030	0	50	SH	S3	650	
U153	17.0	5400-0090	0	50	SH	--	650	CAP = P. SHORT ON 1-2-3-4. HOLD DOWN S7 AND PRESS S3.
U154	20.0	5400-9030	0	50	SH	S3	650	
U192	20.0	5400-9030	0	50	SH	S3	650	
U309	20.0	5400-9030	0	50	SH	S3	650	
U381	35.0	5400-9030	0	55	SH	S3	800	
U709	6.3	5400-7130	0	42	SH	S3	650	DUAL DIODE. NOTE 1.
UAA91	20.0	4300-7215	0	78	SH	S1	400	DUAL DIODE. NOTE 1.
UABC80	25.0	5480-9070	15	---	X4	S5	175	TRIODE SECTION.
UABC80	25.0	5400-6070	0	35	SH	S1	400	DIODE NO. 1.
UABC80	25.0	5400-2137	0	78	SH	S1	400	DUAL DIODE. NOTE 1.
UAF42	12.6	8160-2574	25	---	X2	S5	375	PENT. SECT. USE ADAPTER SA-5, 1050-129.
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TUBE TYPE	FIL.	SFLECTORS	BIAS	SHUNT	MULT	PRESS	MIN. MUT. COND	NOTATIONS
UAF42	12.6	8100-3070	0	61	SH	S1	400	DIODE SECT. USE ADAPTER SA-5, 1050-129.
UB41	20.0	8100-6473	0	78	SH	S1	400	DUAL DIODE. USE ADAPTER SA-5, 1050-129 NOTE 1
UI49	20.0	5420-6139	14	---	X4	S5	450	PENTODE SECTION
UI49	20.0	5400-8730	0	60	SH	S1	400	DUAL DIODE. NOTE 1
UBC41	12.6	8130-2070	9	---	X1	S5	800	TRIODE SECT. USE ADAPTER SA-5, 1050-129.
UBC41	12.6	8100-6570	0	27	SH	S1	400	DUAL DIODE. NOTE 1.
UBC81	12.6	5420-1030	9	---	X1	S5	800	USE ADAPTER SA-5, 1050-129.
UBC81	12.6	5400-8630	0	27	SH	S1	400	TRIODE SECTION.
UBF80	17.0	5420-6139	8	---	X4	--	350	DUAL DIODE. NOTE 1.
UBF80	17.0	5400-7839	0	30	SH	S1	400	PENTODE SECTION. HOLD DOWN S1 & PRESS S5 DUAL DIODE. NOTE 1.
UBF89	20.0	5420-6139	14	---	X4	S5	450	PENTODE SECTION.
UBF89	20.0	5400-8730	0	60	SH	S1	400	DUAL DIODE. NOTE 1.
UC92	10.0	4360-1070	14	---	X4	S5	625	
UCC85	25.0	5472-6183	14	---	X4	S5	625	DUAL TRIODE. NOTE 1.
UCH42	12.6	8160-2574	19	---	X2	S5	400	HEPTODE SECT. USE ADAPTER SA-5, 1050-129
UCH42	12.6	8140-3076	27	---	X2	S5	475	TRIODE SECT. USE ADAPTER SA-5, 1050-129.
UCH81	20.0	5420-6137	15	---	X2	S5	475	HEPTODE SECTION.
UCH81	20.0	5490-8032	20	---	X4	S5	475	TRIODE SECTION.
UCL82	50.0	5430-6720	26	---	X4	S5	625	PENTODE SECTION.
UCL82	50.0	5410-9080	0	---	X2	S5	775	TRIODE SECTION.
UCL83	35.0	4590-6870	25	---	X10	S5	300	PENTODE SECTION.
UCL83	35.0	4520-1030	15	---	X1	S5	450	TRIODE SECTION.
UF41	12.6	8160-2570	21	---	X2	S5	475	USE ADAPTER SA-5, 1050-129.
UF42	20.0	8160-2574	10	---	X4	S5	725	USE ADAPTER SA-5, 1050-129.
UF80	20.0	5420-7819	10	---	X10	S5	400	
UF85	20.0	5420-7819	17	---	X4	S5	550	
UF86	12.6	5490-6138	11	---	X4	S5	300	
UF89	12.6	5420-7839	12	---	X4	S5	475	
UL41	50.0	8160-2570	10	---	X10	S5	600	USE ADAPTER SA-5, 1050-129.
UL84	50.0	5420-7930	16	---	X10	S5	475	
UM80	20.0	5410-9020	---	100	SH	S6	----	CONNECT A 1 MEGOHM RESISTOR FROM PLATE JACK TO OCTAL SOCKET PIN 7. VARY BIAS TO VARY BEAM ANGLE.
UY41	35.0	8100-2070	0	48	SH	S3	500	SET 'LINE ADJUST' AT 625.
UY42	35.0	8100-2070	0	48	SH	S3	500	USE ADAPTER SA-5, 1050-129.
UY85	35.0	5400-9030	0	55	SH	S3	800	SET 'LINE ADJUST' AT 625.
UY89	35.0	4500-9030	0	48	SH	S3	500	USE ADAPTER SA-5, 1050-129.
W17	1.4	7160-2300	0	---	X2	S4	225	
W77	6.3	4310-5726	15	---	X4	S5	225	
X17	1.4	7140-3062	10	---	X2	S4	425	NOTE 2.
X78	6.3	4320-5107	39	---	X2	S5	250	HEXODE SECTION.
X78	6.3	4370-6000	21	---	X20	S5	950	TRIODE SECTION.
X108	20.0	4320-5107	39	---	X2	S5	250	HEXODE SECTION.
X108	20.0	4370-6000	21	---	X20	S5	950	TRIODE SECTION.
X119	20.0	5420-6137	15	---	X2	S5	475	HEPTODE SECTION.
X119	20.0	5490-8032	20	---	X4	S5	475	TRIODE SECTION.
X142	12.6	8160-2574	19	---	X2	S5	400	HEPTODE SECT. USE ADAPTER SA-5, 1050-129
X142	12.6	8140-3076	27	---	X2	S5	475	TRIODE SECTION.
X719	6.3	5420-6137	15	---	X2	S5	475	HEPTODE SECTION.
X719	6.3	5490-8032	20	---	X4	S5	475	TRIODE SECTION.
X727	6.3	4370-5621	0	---	X2	--	250	AMPL. SECTION. HOLD DOWN S1 & PRESS S5.
X727	6.3	4310-6027	20	---	X10	S5	400	OSCILLATOR SECTION.
XC95	2.0	4320-5670	11	---	X10	S5	650	
XC97	2.5	4320-5016	13	---	X10	S5	800	
XC900	2.0	4310-5076	17	---	X10	S5	475	
XCC82	6.3	4572-6183	25	---	X2	S5	675	DUAL TRIODE. NOTE 1.
XCC189	4.3	5472-6183	22	---	X10	S5	475	DUAL TRIODE. NOTE 1.
XCF80	4.3	5420-6371	12	---	X4	S5	625	PENTODE SECTION.
XCF80	4.3	5490-1086	26	---	X4	S5	675	TRIODE SECTION.
XCF86	5.0	4520-8930	11	---	X10	S5	475	PENTODE SECTION.

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TUBE TYPE	FIL.	SELECTORS	BIAS	SHUNT	MULT	PRESS	MIN. MUT. COND	NUTATIONS
XCF86	5.0	4560-7030	33	---	X10	S5	350	TRIODE SECTION.
XCF801	4.3	5420-6710	10	---	X10	S5	475	PENTODE SECTION
XCF801	4.3	5490-8030	29	---	X10	S5	550	TRIODE SECTION
XCH81	3.0	5420-6137	15	---	X2	S5	475	HEPTODE SECTION.
XCH81	3.0	5490-8032	20	---	X4	S5	475	TRIODE SECTION.
XCL82	7.5	5430-6720	26	---	X4	S5	625	PENTODE SECTION.
XCL82	7.5	5410-9080	0	---	X2	S5	775	TRIODE SECTION.
XCL84	7.5	5480-6970	10	---	X10	S5	630	PENTODE SECTION.
XCL84	7.5	5410-2030	12	---	X4	S5	630	TRIODE SECTION.
XCL85	10.0	5490-6780	36	---	X10	S5	380	PENTODE SECTION.
XCL85	10.0	5420-1030	23	---	X2	S5	960	TRIODE SECTION.
XF80	3.0	5420-7819	10	---	X10	S5	400	
XF85	3.0	5420-7819	17	---	X4	S5	550	
XF86	2.5	5490-6138	11	---	X4	S5	300	
XF183	3.0	5420-7819	17	---	X4	S5	650	
XF184	3.0	5420-7819	10	---	X10	S5	500	
XL36	12.6	7250-0480	32	---	X10	S5	450	CAP = P.
XL84	7.5	5420-7930	14	---	X10	S5	475	
XL86	7.5	5420-7930	16	---	X10	S5	475	
XL500	12.6	4520-0780	73	---	X4	S5	400	CAP=P. USE ADAPTER SA-8, 1050-168.
XY88	17.0	5400-9000	0	56	SH	S3	800	CONNECT CAP TO EXT. SELF BIAS RES. JACKS MODEL 752A= CAP=K
YC95	3.0	4320-5670	11	---	X10	S5	650	
YC97	3.0	4320-5016	13	---	X10	S5	800	
YCC189	5.0	5472-6183	22	---	X10	S5	475	DUAL TRIODE. NOTE 1.
YF183	4.3	5420-7819	17	---	X4	S5	650	
YF184	4.3	5420-7819	10	---	X10	S5	500	
YL84	6.3	5420-7930	14	---	X10	S5	475	
YL1080	1.4	4513-6700	28	---	X4	S5	350	TETRODE NO. 1.
YL1080	1.4	4531-8700	28	---	X4	S5	350	TETRODE NO. 2.
YL1370	6.3	7250-0318	12	---	X10	S4	425	CAP=P.
YL1371	12.6	7250-0318	12	---	X10	S4	425	CAP=P.
YL1372	25.0	7250-0318	12	---	X10	S4	425	CAP=P.
Z63	6.3	7200-3485	21	---	X2	S5	375	CAP=G
Z77	6.3	4310-5726	11	---	X10	S5	300	
Z142	20.0	8160-2574	10	---	X4	S5	725	USE ADAPTER SA-5, 1050-129
Z150	6.3	8160-2574	10	---	X4	S5	725	USE ADAPTER SA-5, 1050-129
Z152	6.3	5420-7819	10	---	X10	S5	400	
Z719	6.3	5420-7819	10	---	X10	S5	400	
Z729	6.3	5490-6138	11	---	X4	S5	300	
ZD17	1.4	7160-5400	13	---	X1	S5	400	PENTODE SECTION.
ZD17	1.4	7100-3000	0	15	SH	S1	400	DIODE SECTION.
ZD152	6.3	5420-6139	8	---	X4	--	350	PENTODE SECTION. HOLD DOWN S1 & PRESS S5
ZD152	6.3	5400-7839	0	30	SH	S1	400	DUAL DIODE. NOTE 1.



# **Obsolete Tube Types**

**SUPPLEMENTARY TEST DATA**

**for**

**MODELS 752 & 752A**

**TUBE TESTERS**

TUBE TYPE	FIL	SELECTORS	BIAS	SHUNT	MULT	PRESS	MINIMUM MUT COND	NOTATIONS
7762	25.0	3610-5720	40	---	X4	S5	650	
7802	6.3	7841-5263	45	---	X20	S5	500	1Dual Triode
7803	6.3	4572-6183	20	---	X10	S5	775	1Dual Triode
7861	12.6	9173-6482	16	---	X10	S5	300	1Dual Triode
7867	6.3	7250-0830	26	---	X10	---	525	CAP=P, HOLD S1 AND PRESS S5
{7868†	6.3	4560-9730	11	---	X10	S5	525	USE ADAPTER SA-4, 1050-127
{Model 752A:		No Adapter Required.						
7889	25.0	3672-8154	15	---	X4	S5	400	1Dual Triode
{7895†	6.3	3140-2080	16	---	X10	S5	525	USE ADAPTER SA-3, 1050-127
{Model 752A:								
7895	6.3	AC40-2080	16	---	X10	S5	525	
7898	12.6	4572-6183	10	---	X10	S5	475	1Dual Triode
7905	6.3	9120-6807	15	---	X10	S5	325	
7984†	12.6	1CA0-3B90	46	---	X10	S5	350	
7995	6.3	1430-7826	11	---	X10	S5	650	
8032	12.6	7250-0318	12	---	X10	S4	425	
{8056†	6.3	3100-2084	0	70	SH	S1	650	Cap=P MAKE NO GAS TEST USE ADAPTER SA-3, 1050-127
{Model 752A:								
8056	6.3	AC00-2084	0	70	SH	S1	650	MAKE NO GAS TEST
{8058†	6.3	1300-0020	13	---	X10	S5	625	CAP=P, 8-SHELL USE ADAPTER SA-3, 1050-127
{Model 752A:								
8058	6.3	AC00-0020	13	---	X10	S5	625	CAP=P, 8-SHELL.
8064	25.0	6310-5780	17	---	X4	S5	400	
8068	6.3	2750-0830	18	---	X10	S5	325	Cap=P
8077	12.6	4520-7813	0	---	X10	S5	500	
8084	12.6	3410-5627	17	---	X10	S5	400	
8096	6.3	6720-1050	21	---	X2	S5	300	
{8102	12.6	4590-6780	11	---	X4	S5	625	
{8102	12.6	4530-1020	13	---	X10	S5	525	Pent. Sect. Triode Sect.
8106	12.6	4570-1890	14	---	X10	S5	500	
8113	6.3	4310-5670	22	---	X4	S5	550	
8136	6.3	4310-5627	10	---	X10	S5	400	
8149†	12.6	1CA0-7890	50	---	X4	S5	700	
8150†	12.6	1CA0-0860	50	---	X4	S5	625	Cap=P
8156†	12.6	1CA0-3760	31	---	X4	S5	650	Cap=P
8185	6.3	8120-3060	20	---	X20	S5	650	
8186	25.0	8120-3060	20	---	X20	S5	650	
{8203†	6.3	3140-2080	26	---	X10	S5	300	USE ADAPTER SA-3, 1050-127
{Model 752A:								
8203	6.3	AC40-2080	26	---	X10	S5	300	
8236	6.3	7210-0430	65	---	X4	S5	450	Cap=P
8298	6.3	7250-0318	12	---	X10	S4	425	Cap=P
8327	6.3	4520-7930	23	---	X10	S5	375	
8334	6.3	3460-7050	12	---	X10	S5	750	
{8393†	12.6	3140-2080	24	---	X10	S5	500	USE ADAPTER SA-3, 1050-127
{Model 752A:								
8393	12.6	AC40-2080	24	---	X10	S5	500	
8417	6.3	2750-3480	10	---	X20	S5	375	
8425	6.3	4310-5672	10	---	X10	S5	625	
8426	12.6	4310-5672	10	---	X10	S5	625	
8431	12.6	5472-6183	20	---	X20	S5	500	1Dual Triode



# NOTES

⌘DUAL TEST. For dual triodes make normal Leakage test first then repeat Leakage test for 2nd section with S8 pressed. Proceed with 1st section GM test. On all dual tubes, for 2nd section test press S8 with button listed in the press column.

\*Verify shorts by setting filament switch to OFF position.

★Approximate starting voltage for voltage regulator tubes.

†Read 0–100 milliamperes with S9 pressed.

VR. For voltage regulator tubes the figure in the MINIMUM MUT. COND. column indicates the nominal operating voltage.

#Set BIAS to 100, press proper button, then rotate BIAS dial counterclockwise until tube strikes.

‡For Model 752: A symbol (§) to the right of the tube type indicates that for TUBE TESTER Model 752, the Universal Adapter CA-5, 1050-164 is available for testing tubes with the more recent type basings, such as, Compactrons, Novars, 5 and 7 pin Nuvistors, ten-pin types, including Decals. The CA-4, 1050-135 Adapter (DISCONTINUED) can still be used but requires the use of the SA-11, 1050-177 Adapter for testing Decal types.

TUBE TYPE	FIL	SELECTORS	BIAS	SHUNT	MULT	PRESS	MINIMUM MUT COND	NOTATIONS
OA2	OFF	0000-5020	---	---	VR	†S9	150V	★15V. REGULATION-2 VOLTS. FROM 5 TO 30 MA.
OA3/VR75	OFF	0000-5020	---	---	VR	†S9	75V	★100V. REGULATION-5 VOLTS. FROM 5 TO 40 MA.
OB2	OFF	0000-5020	---	---	VR	†S9	108V	★115V. REGULATION-2 VOLTS. FROM 5 TO 30 MA.
OB3/VR90	OFF	0000-5020	---	---	VR	†S9	90V	★105V. REGULATION-3 VOLTS. FROM 5 TO 30 MA.
OC2	OFF	0000-5020	---	---	VR	†S9	75V	★94V. REGULATION-3 VOLTS. FROM 5 TO 30 MA.
OC3/VR105	OFF	0000-5020	---	---	VR	†S9	105V	★115V. REGULATION-2 VOLTS. FROM 5 TO 40 MA.
OD3/VR150	OFF	0000-5020	---	---	VR	†S9	150V	★100V. REGULATION-4 VOLTS. FROM 5 TO 40 MA.
OE3/85A1	OFF	0000-2080	---	---	VR	†S9	85V	★120V. REGULATION-3 VOLTS. FROM 1 TO 8 MA.
OG3/85A2	OFF	0000-1020	---	---	VR	†S9	85V	★123V. REGULATION-3 VOLTS. FROM 1 TO 16 MA.
OZ4	OFF	0000-5380	0	65	SH	S2	650	DIODE DIODE. HOLD BUTTON DOWN FOR 3 SECONDS.
1A3	1.4	7100-2030	0	0	SH	S1	400	Cap = P
1AD2†	1.4	1000-0000	0	53	SH	S6	400	
1AD4	1.1	3540-1200	14	---	X4	S4	225	
1AG4	1.1	3540-1200	25	---	X1	S5	625	
1AH4	1.1	5340-1200	12	---	X1	S5	475	
1AK4	1.1	5340-1200	12	---	X1	S5	375	
1AU2	1.1	4500-9000	0	81	SH	S6	400	
1AY2	1.1	2700-0000	0	90	SH	S6	400	
1B1	OFF	0000-1400	0	0	SH	---	---	Cap = P
1B3	1.1	7200-0000	0	80	SH	S6	400	
1BC2	1.1	1500-0000	0	84	SH	S6	400	
1BH2	1.1	3600-0000	0	84	SH	S6	400	
1BK2	1.4	4200-0000	0	85	SH	S6	400	
1BX2	1.4	1200-0000	0	80	SH	S6	400	
1BY2†	1.1	1000-0000	0	53	SH	S6	400	
1DG3	1.1	8300-0000	0	57	SH	S6	400	
1D-K29	1.1	1200-0000	0	---	X1	S3	400	
1G3	1.1	7200-0000	0	80	SH	S6	400	
1H2	1.4	1200-0000	0	78	SH	S6	400	
1J3	1.1	7200-0000	0	53	SH	S6	400	
1K3	1.1	7200-0000	0	53	SH	S6	400	
1N2	1.1	7200-0000	0	80	SH	S6	400	
1R5	*1.4	1740-3062	10	---	X2	S4	425	
1R-K23	1.4	4200-0000	0	85	SH	S6	400	
1S2A	1.4	4200-0000	0	85	SH	S6	400	
1S4	1.4	1730-2400	23	---	X2	S4	475	
1S5	1.4	1760-5400	13	---	X1	S5	400	
1S5	1.4	1700-3000	0	15	SH	S1	400	Pent. Sect.
1U4	1.4	1760-2300	14	---	X2	S5	275	Diode Sect.
1V2	0.6	4500-9000	0	65	SH	S6	650	
1W5	1.1	4520-7800	0	---	X1	S5	450	



TUBE TYPE	FIL	SELECTORS	BIAS	SHUNT	MULT	PRESS	MINIMUM MUT COND	NOTATIONS	TUBE TYPE	FIL	SELECTORS	BIAS	SHUNT	MULT	PRESS	MINIMUM MUT COND	NOTATIONS
2T4	2.5	4320-1050	16	---	X10	S4	400		3CY5	3.0	4310-5620	12	---	X4	---	625	HOLD DOWN S1 AND PRESS S5
3A2	3.0	1200-0000	0	85	SH	S6	650	Cap=P	3CZ3	3.0	2700-0000	0	88	SH	S6	400	Cap=P
3A3	3.0	7200-0000	0	75	SH	S6	650	Cap=P	3D21A	12.6	7260-0480	32	---	X4	S5	800	Cap=P
3AF4A	3.0	4320-1050	16	---	X10	S4	400		3DA3	3.0	3800-0000	0	87	SH	S6	400	Cap=P
3AL5	3.0	4300-7215	0	78	SH	S1	400	XDual Diode	3DB3	3.0	7200-0000	0	75	SH	S6	650	Cap=P
3AT2†	3.0	1000-0000	0	86	SH	S6	400	Cap=P	3DC3	3.0	7200-0000	0	86	SH	S6	400	Cap=P
3AU6	3.0	4310-5672	10	---	X4	S5	475		3DF3	3.0	3800-0000	0	87	SH	S6	400	Cap=P
{3AV6	3.0	4310-7025	14	---	X4	S5	200	Triode Sect.	3DG4	3.0	3100-7500	0	63	SH	S3	800	XDual Diode
{3AV6	3.0	4300-6527	0	30	SH	S1	400	XDual Diode	3DH3	3.0	3800-0000	0	90	SH	S6	400	Cap=P
3AW2†	3.0	2000-0000	0	87	SH	S6	400	Cap=P	3DJ3	3.0	7200-0000	0	90	SH	S6	400	Cap=P
3AW3	3.0	7200-0000	0	75	SH	S6	650	Cap=P	3DK6	3.0	4310-5627	10	---	X10	S5	400	Cap=P
3B2	3.0	7200-0000	0	68	SH	S6	650	Cap=P	3DR3	3.0	3800-0000	0	90	SH	S6	400	Cap=P
3B4	2.5	4530-7100	50	---	X2	S5	525		3DS3	3.0	3800-0000	0	90	SH	S6	400	Cap=P
{3B24	3.0	4100-0000	0	90	SH	S6	650	CAP-P. 1ST. HALF OF FIL	3DT6	3.0	4310-5627	12	---	X1	S5	375	Cap=P
{3B24	3.0	2100-0000	0	90	SH	S6	650	CAP-P. 2ND HALF OF FIL	{3DT6	3.0	4370-5621	8	---	X1	S5	300	Grid No. 1
3B26	3.0	7200-0000	0	92	SH	S6	650	Cap=P	3DX4	3.0	3420-1050	26	---	X10	S5	500	Grid No. 3
3B28	3.0	4100-0000	0	41	SH	S2	650	Cap=P	3DZ4	3.0	3420-1050	12	---	X10	S4	500	
3B29	4.3	4100-0000	0	94	SH	S6	650	Cap=P	{3E29	6.3	5762-0340	15	---	X10	S5	475	
3BA6	3.0	4310-5672	0	---	X4	S5	500	Cap=P	{3E29	6.3	5126-0340	15	---	X10	S5	475	RIGHT CAP=P {USE HICKOK ADAPTE {SA-6 CODE NO. 1050-1
3BC5	3.0	4310-5620	11	---	X4	S5	675		3EA5	3.0	4310-5620	12	---	X10	S5	375	Left Cap=P
{3BE6	3.0	4370-5621	0	---	X2	---	250	AMPL. SECT. HOLD DOWN STAND PRESS S5.	3EH7	3.0	4520-7819	17	---	X4	S5	650	
{3BE6	3.0	4310-6027	20	---	X10	S5	400	Osc. Sect.	3EJ7	3.0	4520-7819	10	---	X10	S5	650	
3BL2†	3.0	1000-0000	0	88	SH	S6	400	Cap=P	3ER5	3.0	4320-5670	11	---	X10	S5	650	
3BM2†	3.0	1000-0000	0	88	SH	S6	400	Cap=P	3EV5	3.0	3410-5620	10	---	X10	S5	550	
3BN2†	3.0	1000-0000	0	68	SH	S6	650	Cap=P	3FH5	3.0	3420-5070	12	---	X10	S5	550	
3BN4	3.0	4320-5010	16	---	X10	S5	425		3FS5	3.0	4310-5670	10	---	X10	S5	500	
3BN4A	3.0	4320-5010	16	---	X10	S5	500		3GK5	3.0	3420-5076	14	---	X10	S5	750	
{3BN6	3.0	4320-7516	0	---	X1	S5	500	Limiter Grid	3GW5	3.0	4320-1050	19	---	X10	S5	300	
{3BN6	3.0	4360-7512	0	---	X1	S5	525	QUADRATURE GRID	3HA5	2.5	4310-5076	17	---	X10	S5	475	
3BS2†	3.0	1000-0000	0	85	SH	S6	400	Cap=P	3HK5	3.0	4310-5020	17	---	X10	S5	580	
3BT2†	3.0	2000-0000	0	87	SH	S6	400	Cap=P	3HM5	3.0	4310-5076	17	---	X10	S5	475	
{3BU8	3.0	4570-8219	0	---	X2	---	175	PENTODE NO. 1. HOLD DOWN STAND PRESS S5.	3HQ5	3.0	4310-5076	14	---	X20	S5	450	
{3BU8	3.0	4570-3216	0	---	X2	---	175	PENTODE NO. 2. HOLD DOWN STAND PRESS S5.	3JC6	3.0	4520-7819	11	---	X10	S5	700	
3BW2†	3.0	1000-0000	0	90	SH	S6	400	Cap=P	3JD6	3.0	4520-7839	10	---	X10	---	440	HOLD DOWN S1 AND PRESS S5.
3BX6	3.0	4520-7819	10	---	X10	S5	400		3JH6	3.0	4310-5627	12	---	X10	S5	375	
{3BY6	3.0	4310-5627	12	---	X2	S5	375	Grid No. 1	{3KF8	3.0	4570-8219	10	---	X2	S5	225	Pent. No. 1
{3BY6	3.0	4370-562†	16	---	X2	---	150	GRID. NO. 3. HOLD DOWN STAND PRESS S5.	{3KF8	3.0	4570-3216	10	---	X2	S5	225	Pent. No. 2
3BZ6	3.0	4310-5627	10	---	X4	S5	700		3KT6	3.0	4520-7819	9	---	X10	S5	750	
3C4	2.5	1760-2300	23	---	X2	S4	425	G-SIDE PIN P-TOP PIN	3V4	3.0	7160-2300	0	---	X4	---	300	HOLD DOWN S1 AND PRESS S5
3C24	6.3	4100-0000	0	---	X2	S5	275	Cap=P	4-65A	7.5	1740-0600	Test for Shorts Only.					
3CA3	3.0	7200-0000	0.0	85	SH	S6	400		4AU6	4.3	4310-5672	10	---	X4	S5	475	Triode Sect.
3CB6	3.0	4310-5627	10	---	X4	S5	700		{4AV6	4.3	4310-7025	14	---	X4	S5	200	XDual Diode
3CE5	3.0	4310-5620	10	---	X4	S5	700		{4AV6	4.3	4300-6527	0	30	SH	S1	400	
3CN3A	3.0	2700-0000	0	87	SH	S6	400	Cap=P	4BC5	4.3	4310-5620	11	---	X4	S5	675	
{3CS6	3.0	4310-5627	16	---	X1	S5	300	Grid No. 1	4BC8	4.3	4572-6183	18	---	X10	S5	375	XDual Triode
3CS6	3.0	4370-5621	0	---	X1	S5	775	Grid No. 3	{4BN6	4.3	4320-7516	0	---	X1	S5	500	Limiter Grid
3CU3	3.0	2700-0000	0	88	SH	S6	400	Cap=P	{4BN6	4.3	4360-7512	0	---	X1	S5	525	QUADRATURE GRID
3CV3	3.0	7200-0000	0	86	SH	S6	400	Cap=P	4BO7A	4.3	4572-6183	15	---	X10	S5	500	XDual Triode
3CX3	3.0	3800-0000	0	87	SH	S6	400	Cap=P	4BS8	4.3	4572-6183	16	---	X10	S5	450	XDual Triode
3CY3	3.0	7200-0000	0	87	SH	S6	400	Cap=P									

TUBE TYPE	FIL	SELECTORS	BIAS	SHUNT	MULT	PRESS	MINIMUM MUT COND	NOTATIONS
{4BU8	4.3	4570-8219	0	---	X2	---	175	PENTODE NO. 1. HOLD DOWN S1 AND PRESS S5.
{4BU8	4.3	4570-3216	0	---	X2	---	175	PENTODE NO. 2. HOLD DOWN S1 AND PRESS S5.
4BZ6	4.3	4310-5627	10	---	X4	S5	700	
4BZ7	4.3	4572-6183	17	---	X10	S5	425	
4CB6	4.3	4310-5627	10	---	X4	S5	700	
{4CS6	4.3	4310-5627	16	---	X1	S5	300	
{4CS6	4.3	4370-5621	0	---	X1	S5	775	
4CX250B	6.3	3750-0120	Test for Shorts Only.					
4CY5	4.3	4310-5620	12	---	X4	---	625	
4DE6	4.3	4310-5627	10	---	X4	S5	700	
4DK6	4.3	4310-5627	10	---	X10	S5	400	
{4DT6	4.3	4310-5627	12	---	X1	S5	375	
{4DT6	4.3	4370-5621	8	---	X1	S5	300	
4EH7	4.3	4520-7819	17	---	X4	S5	650	
4EJ7	4.3	4520-7819	10	---	X10	S5	500	
4ES8	4.3	4572-6183	22	---	X10	S5	475	
4EW6	4.3	4310-5627	11	---	X4	S5	775	
4GK5	4.3	4320-5076	14	---	X10	S5	750	
4GM6	4.3	4310-5627	10	---	X10	S5	575	
{4GS8	4.3	4570-8219	0	---	X1	---	350	PENT. NO. 1. HOLD DOWN S1 AND PRESS S5
{4GS8	4.3	4570-3216	0	---	X1	---	350	PENT. NO. 2. HOLD DOWN S1 AND PRESS S5
{4GX7	4.3	4520-6710	11	---	X10	S5	450	Pent. Sect.
{4GX7	4.3	4590-8010	15	---	X10	S5	600	Triode Sect.
4GZ5	4.3	4320-7610	21	---	X4	S5	750	
4HA5	4.3	4310-5076	17	---	X10	S5	475	
{4HA7†	4.3	1C90-A040	22	---	X4	S5	475	Triode No. 1
{4HA7	4.3	1CB0-2030	14	---	X4	S5	200	Triode No. 2
{4HC7†	4.3	1C90-A040	14	---	X10	S5	300	Triode No. 1
{4HC7	4.3	1CB0-2030	12	---	X1	S5	550	Triode No. 2
4HK5	4.3	4310-5020	17	---	X10	S5	575	
4HM5	4.3	4310-5076	17	---	X10	S5	475	
4HM6	4.3	4520-7819	10	---	X10	S5	625	
4HQ5	4.3	4310-5076	14	---	X20	S5	450	
{4HS8	4.3	4570-8219	10	---	X1	S5	325	Pent. No. 1
{4HS8	4.3	4570-3216	10	---	X1	S5	325	Pent. No. 2
4HT6	4.3	4520-7819	10	---	X10	S5	475	
4JC6	4.3	4520-7819	11	---	X10	S5	700	
4JD6	4.3	4520-7839	10	---	X10	---	450	HOLD DOWN S1 AND PRESS S5.
4JH6	4.3	4310-5627	12	---	X10	S5	375	
4JK6	4.3	3410-5627	14	---	X20	S5	625	
4JL6	4.3	3410-5627	20	---	X10	S5	500	
{4KE8	4.3	4520-6370	9	---	X10	S5	550	Pent. Sect.
{4KE8	4.3	4590-1080	17	---	X10	S5	475	Triode Sect.
{4KF8	4.3	4570-8219	10	---	X2	S5	225	Pent. No. 1
{4KF8	4.3	4570-3216	10	---	X2	S5	225	Pent. No. 2
4KT6	4.3	4520-7819	9	---	X10	S5	750	
{4LJ8	4.3	4590-6780	10	---	X10	S5	625	Pent. Sect.
4LJ8	4.3	4510-2030	10	---	X10	S5	500	Triode Sect.
4LU6	4.3	4310-5627	10	---	X10	S5	375	
{4MK8	4.3	4570-8219	0	---	X2	---	175	PENT. NO. 1. HOLD DOWN S1 AND PRESS S5
{4MK8	4.3	4570-3216	0	---	X2	---	175	PENT. NO. 2. HOLD DOWN S1 AND PRESS S5
4X150A	6.3	3750-0120	Test for Shorts Only.					
4X250B	6.3	3750-0120	Test for Shorts Only.					
{5AM8	5.0	4520-6319	10	---	X4	S5	550	Pent. Sect.
{5AM8	5.0	4500-8070	0	78	SH	S1	400	Diode Sect.
{5AN8	5.0	4580-6791	10	---	X4	S5	700	Pent. Sect.
{5AN8	5.0	4520-1736	24	---	X4	S5	500	Triode Sect.
5AQ5	5.0	4310-5620	18	---	X4	S5	575	
5AR4	5.0	8200-6400	0	68	SH	S3	650	✗Dual Diode
{5AS8	5.0	4520-9137	10	---	X4	S5	700	Pent. Sect.
{5AS8	5.0	4500-6087	0	78	SH	S1	400	Diode Sect.
{5AT8	5.0	4590-6738	10	---	X4	S5	725	Pent. Sect.
{5AT8	5.0	4510-2038	15	---	X10	S5	350	Triode Sect.
5AU4	7.5	8200-6000	0	51	SH	S3	650	Plate No. 1
5AU4	7.5	8200-4000	0	45	SH	S3	650	Plate No. 2
5AV8	5.0	4560-9870	10	---	X4	S5	700	Pent. Sect.
5AV8	5.0	4520-3010	24	---	X4	S5	500	Triode Sect.
5B8	5.0	4560-9871	15	---	X4	S5	700	Pent. Sect.
5B8	5.0	4520-3019	24	---	X4	S5	500	Triode Sect.
5BC3†	5.0	1300-9000	0	40	SH	S3	650	PLATE NO. 1 USE ADAPTER SA-4, 1050-144
5BC3	5.0	1300-5000	0	35	SH	S3	650	PLATE NO. 2
{Model 752A:	No Adapter Required.							
{5BE8	5.0	4590-6783	12	---	X4	S5	475	Pent. Sect.
{5BE8	5.0	4510-2030	10	---	X10	S5	525	Triode Sect.
5BK7A	5.0	4572-6183	10	---	X10	S5	525	✗Dual Triode
5BQ7A	5.0	4572-6183	15	---	X10	S5	400	✗Dual Triode
{5BR8	5.0	4590-6780	12	---	X4	S5	475	Pent. Sect.
{5BR8	5.0	4510-2030	10	---	X10	S5	525	Triode Sect.
5BT8	5.0	4580-6790	10	---	X4	S5	700	Pent. Sect.
5BT8	5.0	4500-1230	0	68	SH	S1	400	✗Dual Diode
5BW8	5.0	4560-9870	12	---	X4	S5	475	Pent. Sect.
5BW8	5.0	4500-3120	0	78	SH	S1	400	✗Dual Diode
5CG8	5.0	4590-6780	10	---	X4	S5	725	Pent. Sect.
5CG8	5.0	4510-2030	15	---	X10	S5	350	Triode Sect.
5CL8	5.0	4590-6780	10	---	X4	S5	550	Tetrode Sect.
5CL8	5.0	4510-2030	12	---	X10	S5	425	Triode Sect.
5CM8	5.0	4520-6730	10	---	X4	S5	700	Pent. Sect.
5CM8	5.0	4590-1080	12	---	X2	S5	475	Triode Sect.
5CQ8	5.0	4520-6370	10	---	X4	S5	525	Tetrode Sect.
5CQ8	5.0	4590-1080	11	---	X10	S5	425	Triode Sect.
5CZ5	5.0	4530-9170	10	---	X4	S5	700	
{5DH8	5.0	4590-6783	10	---	X4	S5	775	Pent. Sect.
{5DH8	5.0	4510-2030	14	---	X4	S5	550	Triode Sect.
5DJ4	5.0	8200-6000	0	35	SH	S3	650	Plate No. 1
5DJ4	5.0	8200-4000	0	30	SH	S3	650	Plate No. 2
5EA8	5.0	4520-6370	9	---	X4	S5	550	Pent. Sect.
5EA8	5.0	4590-1080	10	---	X10	S5	525	Triode Sect.
5ES8	5.0	4572-6183	22	---	X10	S5	475	✗Dual Triode



TUBE TYPE	FIL	SELECTORS	BIAS	SHUNT	MULT	PRESS	MINIMUM MUT COND	NOTATIONS
{5E8	5.0	4570-1980	9	----	X4	S5	550	Pent. Sect.
{5E8	5.0	4520-3060	10	X10	S5	525	525	Triode Sect.
5EW6	5.0	4310-5627	11	----	X4	S5	775	
{5FG7	5.0	4590-6780	10	----	X4	S5	575	Pent. Sect.
{5FG7	5.0	4510-2030	14	----	X10	S5	475	Triode Sect.
{5FV8	5.0	4590-6780	10	----	X4	S5	550	Pent. Sect.
{5GH8	5.0	4510-2030	15	----	X10	S5	450	Triode Sect.
{5GH8	5.0	4520-6370	11	----	X4	S5	625	Pent. Sect.
{5GH8	5.0	4590-1080	13	----	X10	S5	525	Triode Sect.
5GM6	5.0	4310-5627	10	----	X10	S5	575	
{5GS7	5.0	4590-6780	10	----	X10	S5	500	Pent. Sect.
{5GS7	5.0	4510-2030	33	----	X10	S5	300	Triode Sect.
5GX6	5.0	3410-5627	13	----	X2	S5	575	
{5GX7	5.0	4520-6710	11	----	X10	S5	450	Pent. Sect.
{5GX7	5.0	4590-8010	15	----	X10	S5	600	Triode Sect.
{5HA7†	5.0	1C90-A040	22	----	X4	S5	475	
5HA7	5.0	1C80-2030	14	----	X4	S5	200	
{5HB7	5.0	4520-6710	12	----	X4	S5	575	Pent. Sect.
{5HB7	5.0	4590-8010	12	----	X20	S5	300	Triode Sect.
{5HC7†	5.0	1C90-A040	14	----	X10	S5	300	Triode No. 1
{5HC7	5.0	1C80-2030	12	----	X1	S5	550	Triode No. 2
{5HG8	5.0	4520-8930	11	----	X10	S5	475	Pent. Sect.
{5HG8	5.0	4560-7030	33	----	X10	S5	350	Triode Sect.
5HZ6	5.0	3410-5627	10	----	X2	S5	450	
5J6	5.0	4356-2170	17	----	X10	S5	325	xDual Triode
5JK6	5.0	3410-5627	14	----	X20	S5	625	
5JL6	5.0	3410-5627	20	----	X10	S5	500	
{5KD8	5.0	4520-6370	6	----	X4	S5	700	Pent. Sect.
{5KD8	5.0	4590-1080	17	----	X10	S5	500	Triode Sect.
{5KE8	5.0	4520-6370	9	----	X10	S5	550	Pent. Sect.
{5KE8	5.0	4590-1080	17	----	X10	S5	475	Triode Sect.
{5KZ8	5.0	4520-6730	14	----	X4	S5	625	Pent. Sect.
{5KZ8	5.0	4590-1080	18	----	X10	S5	400	Triode Sect.
{5LJ8	5.0	4590-6780	10	----	X10	S5	625	Pent. Sect.
{5LJ8	5.0	4510-2030	10	----	X10	S5	500	Triode Sect.
{5MB8	5.0	4590-6780	8	----	X10	S5	525	Pent. Sect.
{5MB8	5.0	4510-2030	12	----	X10	S5	550	Triode Sect.
{5MQ8	5.0	4520-6370	10	----	X10	S5	450	Pent. Sect.
{5MQ8	5.0	4590-1080	10	----	X10	S5	600	Triode Sect.
{5R4	5.0	8200-6000	0	20	SH	S3	650	Plate No. 1
{5R4	5.0	8200-4000	0	15	SH	S3	650	Plate No. 2
{5T8	5.0	4580-9076	15	----	X4	S5	175	Triode Sect.
{5T8	5.0	4500-6273	0	78	SH	S1	400	xDual Diode
{5T8	5.0	4500-1078	0	78	SH	S1	400	Diode No. 3
{5U4	5.0	8200-6000	0	35	SH	S3	650	Plate No. 1
{5U4	5.0	8200-4000	0	30	SH	S3	650	Plate No. 2
{5U8	5.0	4520-6370	12	----	X4	S5	475	Pent. Sect.
{5U8	5.0	4590-1080	10	----	X10	S5	525	Triode Sect.
{5U9†	6.3	5630-7824	14	----	X10	S5	375	Pent. Sect. USE ADAPTER SA-11, 1050-177.
{5U9†	6.3	56A0-9010	30	----	X10	S5	300	Triode Sect.
{5V3	6.3	8200-6000	0	45	SH	S3	650	Plate No. 1
{5V3	6.3	8200-4000	0	38	SH	S3	650	Plate No. 2
5V4	5.0	8200-6400	0	60	SH	S3	650	xDual Diode
5V6	5.0	7250-3480	18	----	X4	S5	575	
{5V9†	5.0	5630-7412	15	----	X1	----	700	{HEPT. SECT. HOLD DOWN ST AND PRESS S5. USE ADAPTER SA-11, 1050-177.
{5V9	5.0	5680-A090	23	----	X4	S5	650	Triode Sect.
{5X8	5.0	4570-9861	10	----	X4	S5	725	Pent. Sect.
{5X8	5.0	4520-3061	15	----	X10	S5	350	Triode Sect.
{5 9†	6.3	5630-7824	15	----	X10	S5	375	Pent. Sect. USE ADAPTER SA-11, 1050-177.
{5X9	6.3	56A0-9010	14	----	X4	S5	750	Triode Sect.
{5Y3	5.0	8200-6000	0	36	SH	S3	400	Plate No. 1
{5Y3	5.0	8200-4000	0	27	SH	S3	400	Plate No. 2
6AB4	6.3	4360-1070	14	----	X4	S5	625	
{6AB9†	6.3	5690-78A0	16	----	X10	S5	375	TETRODE NO. 1. USE ADAPTER SA-11, 1050-177.
{6AB9	6.3	5630-1240	16	----	X10	S5	375	Tetrode No. 2
6AC7	6.3	7240-8653	13	----	X10	S5	375	
{6AC9†	6.3	1C90-BA87	11	----	X10	S5	450	Pent. Sect.
{6AC9	6.3	1C00-3040	0	87	SH	S1	400	Diode No. 1
{6AC9	6.3	1C00-2030	0	87	SH	S1	400	Diode No. 2
{6AC10†	6.3	1C90-A040	11	----	X10	S5	450	Triode No. 1
{6AC10	6.3	1C7B-5263	11	----	X10	S5	450	xDual Triode
{6AD10†	6.3	1C30-7625	17	----	X2	S5	550	Pent. No. 1
{6AD10	6.3	1C80-BA90	10	----	X10	S5	450	Pent. No. 2
{6AF3	6.3	4500-2000	0	50	SH	S3	650	{CONNECT CAP TO EXT. SELF BIAS RES. JACKS {MODEL 752A-CAP-K
{Model 752A:	6.3	4320-1050	16	----	X10	S4	400	Pent. NO. 1. USE ADAPTER SA-11, 1050-177.
6AF4	6.3	5680-A970	16	----	X10	S5	650	Pent. No. 2
{6AF9†	6.3	5610-4320	12	----	X10	S5	450	Pent. Sect.
{6AF9	6.3	1C80-2A90	12	----	X10	S5	700	Triode No. 1
{6AF11†	6.3	1C60-8050	14	----	X4	S5	500	Triode No. 2
{6AF11	6.3	1C30-4070	11	----	X4	S5	625	
6AG5	6.3	4310-5620	10	----	X4	S5	475	
6AG7	6.3	7240-8651	12	----	X10	S5	625	Pent. Sect.
{6AG9†	6.3	1C80-2A94	14	----	X10	S5	725	Triode Sect.
{6AG9	6.3	1C50-7060	19	----	X4	S5	525	xDual Triode
{6AG11†	6.3	1C85-7694	12	----	X10	S5	525	xDual Diode
{6AG11	6.3	1C00-A3B2	0	80	SH	S1	400	Pent. Sect.
{6AH9†	6.3	1C50-B879	15	----	X10	S5	750	Triode Sect.
{6AH9	6.3	1C20-3040	29	----	X4	S5	625	
6AK5	6.3	4310-5620	10	----	X4	S5	675	
6AK6	6.3	4310-5672	17	----	X2	S5	725	
{6AK9†	6.3	1C80-5970	35	----	X4	S5	850	Pent. Sect.
{6AK9	6.3	1CA0-B070	17	----	X4	S5	575	Triode No. 1
{6AK9	6.3	1C30-2070	30	----	X2	S5	625	Triode No. 2
{6AK10†	6.3	1C90-A040	17	----	X4	S5	725	Triode No. 1
{6AK10	6.3	1C70-5060	17	----	X4	S5	725	Triode No. 2
{6AK10	6.3	1C80-2030	17	----	X4	S5	725	Triode No. 3
6AL3	6.3	4500-9020	0	56	SH	S3	800	CONNECT CAP TO PIN 2 OF OCTAL SOCKET
6AL5	6.3	4300-7215	0	78	SH	S1	400	xDual Diode



TUBE TYPE	FIL	SELECTORS	BIAS	SHUNT	MULT	PRESS	MINIMUM MUT COND	NOTATIONS	TUBE TYPE	FIL	SELECTORS	BIAS	SHUNT	MULT	PRESS	MINIMUM MUT COND	NOTATIONS		
{6AL9†	6.3	1CB0-2A94	5	---	X10	S5	690	Pent. Sect.	{6BA7	6.3	4570-9132	0	---	X2	---	225	AMPL. SECT. HOLD DOWN \$1 AND PRESS \$5		
{6AL9	6.3	1C50-7060	14	---	X10	S5	395	Triode Sect.	{6BA7	6.3	4520-1037	16	---	X10	S5	500	Osc. Sect.		
{6AL11†	6.3	1C80-BA90	19	---	X10	S5	400	Pent. No. 1	{6BA8	6.3	4570-9860	10	---	X10	S5	375	Pent. Sect.		
{6AL11	6.3	1C30-6724	22	---	X2	S5	300	Pent. No. 2	{6BA8	6.3	4520-3010	29	---	X4	S5	425	Triode Sect.		
6AM5	6.3	3410-5720	26	---	X4	S5	400		{6BA11†	6.3	1C40-6387	10	---	X1	S5	325	Pent. No. 1		
{6AM8	6.3	4520-6319	10	---	X4	S5	550	Pent. Sect.	{6BA11	6.3	1C40-2385	10	---	X1	S5	325	Pent. No. 2		
{6AM8	6.3	4500-8070	0	78	SH	S1	400	Diode Sect.	{6BA11	6.3	1C90-80A0	30	---	X2	S5	550	Triode Sect.		
6AN4	6.3	4320-1050	13	---	X10	S5	475		6BC4	6.3	4520-1060	14	---	X20	S5	300			
6AN5	6.3	4310-5670	7	---	X10	---	425	HOLD DOWN \$1 AND PRESS \$5	6BC5	6.3	4310-5620	11	---	X4	S5	675			
{6AN8	6.3	4580-6791	10	---	X4	S5	700	Pent. Sect.	{6BC7	6.3	4500-8697	0	82	SH	S1	400	✕Dual Diode		
{6AN8	6.3	4520-1736	24	---	X4	S5	525	Triode Sect.	{6BC7	6.3	4500-2010	0	82	SH	S1	400	Diode No. 3		
6AO5	6.3	4310-5620	18	---	X4	S5	575		6BC8	6.3	4572-6183	18	---	X10	S5	375	✕Dual Triode		
{6AR11†	6.3	1CA0-89B7	5	---	X10	S5	550	Pent. No. 1	6BD4	6.3	7200-5010	0	25	SH	S1	400	Cap=P		
{6AR11	6.3	1C50-2364	5	---	X10	S5	550	Pent. No. 2	{6BD11†	6.3	1C80-2A90	15	---	X10	S5	450	Pent. Sect.		
6AS6	6.3	4310-5627	0	---	X2	S5	550		{6BD11	6.3	1C60-8050	14	---	X4	S5	800	Triode No. 1		
6AS7	7.5	7841-5263	55	---	X4	S4	625	✕Dual Triode	{6BD11	6.3	1C30-4070	14	---	X4	S5	700	Triode No. 2		
{6AS8	6.3	4520-9137	10	---	X4	S5	700	Pent. Sect.	6BE3†	6.3	1C00-A070	0	58	SH	S3	650			
{6AS8	6.3	4500-6087	0	78	SH	S1	400	Diode Sect.	{6BE6	6.3	4370-5621	0	---	X2	---	250	AMPL. SECT. HOLD DOWN \$1 AND PRESS \$5		
{6AS11†	6.3	1C80-2A90	15	---	X10	S5	325	Pent. Sect.	{6BE6	6.3	4310-6027	20	---	X10	S5	400	Osc. Sect.		
{6AS11	6.3	1C60-8050	11	---	X10	S5	500	Triode No. 1	{6BF11†	6.3	1C80-BA90	30	---	X10	S5	375	Pent. No. 1		
{6AS11	6.3	1C30-4070	16	---	X4	S5	600	Triode No. 2	{6BF11	6.3	1C30-7625	17	---	X2	S5	200	Pent. No. 2		
{6AT6	6.3	4310-7020	15	---	X4	S5	175	Triode Sect.	{6BH3†	6.3	4500-2090	0	52	SH	S3	650	USE ADAPTER SA-4, 1050-144		
{6AT6	6.3	4300-6520	0	30	SH	S1	400	✕Dual Diode	{Model 752A:	No Adapter Required.									
{6AT8	6.3	4590-6738	10	---	X4	S5	725	Pent. Sect.	6BH6	6.3	4310-5627	10	---	X4	S5	425			
6AU4	6.3	4510-2038	15	---	X10	S5	350	Triode Sect.	{6BH8	6.3	4570-9860	8	---	X10	S5	375	Pent. Sect.		
6AU5	6.3	7800-5030	0	58	SH	S3	650		{6BH8	6.3	4520-3010	26	---	X4	S5	500	Triode Sect.		
6AU6	6.3	7210-5830	18	---	X10	S4	350		{6BH11†	6.3	1C80-A9B0	10	---	X10	S5	350	Pent. Sect.		
6AU8	6.3	4310-5672	10	---	X4	S5	475		{6BH11	6.3	1C64-7352	15	---	X10	S5	550	✕Dual Triode		
{6AU8	6.3	4570-9860	10	---	X10	S5	375	Pent. Sect.	6BJ3†	6.3	1C00-A070	0	60	SH	S3	650			
6AU8	6.3	4520-3010	13	---	X10	S5	300	Triode Sect.	{6BJ7	6.3	4500-8697	0	80	SH	S1	400	✕Dual Diode		
6AV6	6.3	4310-7025	14	---	X4	S5	200	Triode Sect.	{6BJ7	6.3	4500-2013	0	80	SH	S1	400	Diode No. 3		
6AV6	6.3	4300-6527	0	30	SH	S1	400	✕Dual Diode	6BJ8	6.3	4580-7090	26	---	X4	S5	425	Triode Sect.		
{6AV11†	6.3	1C97-A546	23	---	X2	S5	750	✕TRIODES NO. 1 & NO. 2	{6BJ8	6.3	4500-6132	0	78	SH	S1	400	✕Dual Diode		
{6AV11	6.3	1C80-2030	23	---	X2	S5	750	Triode No. 3	6BK4	6.3	7200-5010	0	65	SH	S1	500	Cap=G		
{6AW8	6.3	4570-9863	14	---	X10	S5	475	Pent. Sect.	6BK7	6.3	4572-6183	10	---	X10	S5	525	✕Dual Triode		
6AW8	6.3	4520-3019	13	---	X10	S5	250	Triode Sect.	{6BK11†	6.3	1C90-A040	21	---	X2	S5	250	Triode No. 1		
6AX3†	6.3	1C00-4070	0	40	SH	S3	650		{6BK11	6.3	1C78-5263	20	---	X2	S5	200	✕Dual Triode		
6AX4	6.3	7800-5030	0	40	SH	S3	650		6BL7	6.3	7841-5263	23	---	X10	S5	425	✕Dual Triode		
6AX5	6.3	7200-5380	0	40	SH	S3	400	✕Dual Diode	{6BL8	6.3	4520-6371	12	---	X4	S5	625	Pent. Sect.		
{6AY3†	6.3	4500-2090	0	52	SH	S3	650	USE ADAPTER SA-4, 1050-144	{6BL8	6.3	4590-1086	26	---	X4	S5	675	Triode Sect.		
{Model 752A:	No Adapter Required.												---	X4	S5	625	Pent. Sect.		
{6AY11†	6.3	1C85-7694	13	---	X1	S5	650	✕Triode Sect.	{6BM8	6.3	4530-6720	26	---	X2	S5	775	Triode Sect.		
6AY11	6.3	1C00-A3B2	0	78	SH	S1	400	✕Diode Sect.	{6BM8	6.3	4510-9080	0	---	X2	S5	725	Triode Sect.		
6AZ8	6.3	4560-1230	10	---	X4	S5	625	Pent. Sect.	6BN4	6.3	4320-5010	16	---	X10	S5	425			
6AZ8	6.3	4590-8070	24	---	X4	S5	500	Triode Sect.	6BN4A	6.3	4320-5010	16	---	X10	S5	500	Limiter Grid		
6B10†	6.3	1C53-6472	23	---	X4	S5	475	✕Dual Triode	{6BN6	6.3	4320-7516	0	---	X1	S5	500	QUADRATURE GRID		
6B10	6.3	1C00-A890	0	73	SH	S1	400	✕Dual Diode	{6BN6	6.3	4360-7512	0	---	X1	S5	525			
{6BA3†	6.3	4500-2090	0	57	SH	S3	650	USE ADAPTER SA-4, 1050-144	{6BN8	6.3	4580-7090	15	---	X4	S5	400	Triode Sect.		
{Model 752A:	No Adapter Required.												---	X10	S5	400	✕Dual Diode		
6BA5	6.3	3610-5780	18	---	X4	S5	325		{6BN11†	6.3	1C70-B98A	10	---	X10	S5	475	Pent. No. 1		
6BA6	6.3	4310-5672	0	---	X4	S5	500		{6BN11	6.3	1C30-5426	10	---	X10	S5	475	Pent. No. 2		
									6BQ5	6.3	4520-7930	14	---	X10	S5	475			

TUBE TYPE	FIL	SELECTORS	BIAS	SHUNT	MULT	PRESS	MINIMUM MUT COND	NOTATIONS
6BQ6	6.3	7250-0480	28	---	X10	S4	350	Cap=P
6BQ7A	6.3	4572-6183	15	---	X10	S5	400	⌘Dual Triode
6BR8	6.3	4590-6780	12	---	X4	S5	475	Pent. Sect.
6BR8	6.3	4510-2030	10	---	X10	S5	525	Triode Sect.
6BS3†	6.3	4500-2090	0	60	SH	S3	400	USE ADAPTER SA-4, 1050-144
Model 752A:	6.3	No Adapter Required.						
6BU8	6.3	4570-8219	0	---	X2	---	175	PENT. NO. 1, HOLD DOWN STAND PRESS S5
6BU8	6.3	4570-3216	0	---	X2	---	175	PENT. NO. 2, HOLD DOWN STAND PRESS S5
6BV11†	6.3	1C70-A98B	13	---	X4	S5	400	Pent. No.1
6BV11	6.3	1C60-3452	13	---	X4	S5	400	Pent. No.2
6BW3†	6.3	1C00-4070	0	49	SH	S3	650	
6BW8	6.3	4560-9870	12	---	X4	S5	475	Pent. Sect.
6BW8	6.3	4500-3120	0	78	SH	S1	400	⌘Dual Diode
6BW11†	6.3	1C80-89A7	13	---	X10	S5	475	Pent. No. 1
6BW11	6.3	1C30-5426	10	---	X10	S5	600	Pent. No. 2
6BY6	6.3	4310-5627	12	---	X2	S5	375	Grid No. 1
6BY6	6.3	4370-5621	16	---	X2	---	150	GRID NO. 3, HOLD DOWN STAND PRESS S5
6BY8	6.3	4510-7892	10	---	X4	S5	475	Pent. Sect.
6BY8	6.3	4500-6030	0	78	SH	S1	400	⌘Dual Diode
6BY11†	6.3	1C80-BA90	45	---	X4	S5	630	Pent. No. 1
6BY11	6.3	1C30-7625	15	---	X2	S5	350	Pent. No. 2
6BZ3†	6.3	1C00-A070	0	77	SH	S3	400	
6BZ6	6.3	4310-5627	10	---	X4	S5	700	⌘Dual Triode
6BZ7	6.3	4572-6183	17	---	X10	S5	425	
6C4	6.3	4360-1070	25	---	X2	S5	675	Tetrode No. 1
6C9†	6.3	4570-9860	16	---	X4	S5	700	Tetrode No. 2
6C9	6.3	4510-32A0	16	---	X4	S5	700	
6C10†	6.3	1C97-A546	14	---	X4	S5	200	⌘Dual Triode
6C10	6.3	1C80-2030	14	---	X4	S5	200	Triode No. 3
6CA4	6.3	4500-7130	0	42	SH	S3	650	⌘Dual Diode
6CA5	6.3	3420-7610	0	---	X10	S5	425	
6CA7	6.3	7250-3481	23	---	X10	S5	375	
6CA11†	6.3	1C80-BA97	22	---	X4	S5	750	Pent. Sect.
6CA11	6.3	1C60-4050	14	---	X4	S5	750	Triode No. 1
6CA11	6.3	1C30-2070	14	---	X4	S5	700	Triode No. 2
6CB5	7.5	7240-0130	40	---	X10	S5	425	Cap=P
6CB6	6.3	4310-5627	10	---	X4	S5	700	
6CD3†	6.3	1C00-A070	0	63	SH	S3	650	Cap=P
6CD6	6.3	7250-0830	29	---	X10	S4	375	
6CE3†	6.3	1C00-4070	0	65	SH	S3	650	
6CE5	6.3	4310-5620	10	---	X4	S5	700	
6CG3†	6.3	1C00-4070	0	78	SH	S3	400	⌘Dual Triode
6CG7	6.3	4572-6183	23	---	X4	S5	400	Pent. Sect.
6CG8	6.3	4590-6780	10	---	X4	S5	725	Triode Sect.
6CG8	6.3	4510-2030	15	---	X10	S5	350	Triode Sect.
6CH3†	6.3	4500-2090	0	66	SH	S3	650	USE ADAPTER SA-4, 1050-144
Model 752A:	6.3	No Adapter Required.						
6CJ3†	6.3	4500-2090	0	78	SH	S3	400	USE ADAPTER SA-4, 3200-144
Model 752A:	6.3	No Adapter Required.						
6CK3†	6.3	4500-2090	0	83	SH	S1	650	USE ADAPTER SA-4, 1050-144
Model 752A:	6.3	No Adapter Required.						
6CK4	6.3	7210-5080	46	---	X4	S5	850	USE ADAPTER SA-4, 1050-144
6CL3†	6.3	4500-2090	0	83	SH	S1	650	
Model 752A:	6.3	No Adapter Required.						
6CL5	6.3	7240-0130	46	---	X4	S5	725	Cap=P
6CL6	6.3	4520-6317	12	---	X10	S5	475	
6CL8	6.3	4590-6780	10	---	X4	S5	550	Tetrode Sect.
6CL8	6.3	4510-2030	12	---	X10	S5	425	Triode Sect.
6CM3†	6.3	4500-2790	0	64	SH	S3	650	SHORT ON 4. USE ADAPTER SA-4, 1050-144
Model 752A:	6.3	No Adapter Required.						
6CM6	6.3	4530-9170	18	---	X4	S5	575	
6CM7	6.3	4570-6030	27	---	X4	S5	300	Triode No. 1
6CM7	6.3	4580-1090	23	---	X10	S5	275	Triode No. 2
6CN7	6.3	4570-8060	15	---	X4	S5	175	Triode Sect.
6CN7	6.3	4500-2130	0	78	SH	S1	400	⌘Dual Diode
6CQ4	6.3	8700-5030	0	49	SH	S3	650	
6CQ8	6.3	4520-6370	10	---	X4	S5	525	Tetrode Sect.
6CQ8	6.3	4590-1080	11	---	X10	S5	425	Triode Sect.
6CS6	6.3	4310-5627	16	---	X1	S5	300	Grid No. 1
6CS6	6.3	4370-5621	0	---	X1	S5	775	Grid No. 3
6CS7	6.3	4570-6080	22	---	X4	S5	350	Triode No. 1
6CS7	6.3	4530-1090	26	---	X10	S5	275	Triode No. 2
6CT3	6.3	4500-2090	0	45	SH	S3	750	
6CJ5	6.3	4320-7610	22	---	X10	---	375	HOLD DOWN S1 AND PRESS S5
6CU8	6.3	4570-2361	10	---	X4	S5	700	Pent. Sect.
6CU8	6.3	4580-9010	24	---	X4	S5	500	Triode Sect.
6CW4†	6.3	3140-2080	10	---	X10	S4	575	USE ADAPTER SA-3, 1050-127
Model 752A:	6.3							
6CW4	6.3	AC40-2080	10	---	X10	S4	575	
6CW5	6.3	4520-7930	16	---	X10	S5	475	
6CX8	6.3	4570-9860	11	---	X10	S5	400	Pent. Sect.
6CX8	6.3	4520-3010	13	---	X4	S5	675	Triode Sect.
6CY5	6.3	4310-5620	12	---	X4	---	625	HOLD DOWN S1 AND PRESS S5
6CY7	6.3	4570-6080	13	---	X4	S5	200	Triode No.1
6CY7	6.3	4520-1090	60	---	X4	S5	625	Triode No.2
6CZ5	6.3	4530-9170	10	---	X4	S5	700	
6D6	6.3	6100-2354	17	---	X2	S5	500	Cap=G
6D10†	6.3	1C97-A546	15	---	X4	S5	500	⌘Dual Triode
6D10	6.3	1C80-2030	15	---	X4	S5	500	Triode No. 3
6DA4	6.3	7800-5030	0	40	SH	S3	650	
6DA5	6.3	4510-9020	Vary 100	100	SH	S6	---	Connect a Test Socket Pin No. 7.
1 megohm resistor from Plate jack to octal								
Vary Bias to vary beam angle.								
6DB5	6.3	4530-9120	25	---	X10	---	375	HOLD DOWN S1 AND PRESS S5
6DC6	6.3	4310-5627	10	---	X4	S5	625	
6DE4	6.3	7800-5030	0	49	SH	S3	650	
6DE6	6.3	4310-5627	10	---	X4	S5	700	
6DE7	6.3	4570-6080	30	---	X2	S5	625	Triode No. 1
6DE7	6.3	4520-1090	55	---	X4	S5	775	Triode No.2
6DG6	6.3	7250-3480	25	---	X10	---	375	HOLD DOWN S1 AND PRESS S5
6DJ8	6.3	4572-6183	20	---	X10	S5	775	⌘Dual Triode



TUBE TYPE	FIL	SELECTORS	BIAS	SHUNT	MULT	PRESS	MINIMUM MUT COND	NOTATIONS	TUBE TYPE	FIL	SELECTORS	BIAS	SHUNT	MULT	PRESS	MINIMUM MUT COND	NOTATIONS	
6DK3	6.3	4500-2000	0	78	SH	S3	400	CONNECT CAP TO EXT. SELF BIAS RES. JACKS MODEL 752A: CAP-K	6EH7	6.3	4520-7819	17	---	X4	S5	650	Pent. Sect.	
6DK6	6.3	4310-5627	10	---	X10	S5	400	CONNECT CAP TO EXT. SELF BIAS RES. JACKS USE ADAPTER SA-4, 1054-144	{6EH8	6.3	4570-9860	7	---	X4	S5	675	Triode Sect.	
{6DL3†	6.3	4500-2000	0	78	SH	S3	400	Cap = K	{6EH8	6.3	4520-3010	15	---	SH	S1	500	Cap = G	
{Model 752A: No Adapter Required.									6EJ4†	6.3	1C00-6059	0	50	X10	S5	500	Cap = G	
6DM4	6.3	7800-5030	0	49	SH	S3	650	USE ADAPTER SA-4, 1050-144	6EJ7	6.3	4520-7819	10	---	SH	S1	500	Cap = G	
{6DN3†	6.3	4500-2090	0	83	SH	S1	650		6EL4	6.3	7200-5010	0	65	X10	S5	325	Triode No. 1	
{Model 752A: No Adapter Required.									6EM5	6.3	4530-9170	16	---	X2	S5	500	Triode No. 2	
{6DN7	6.3	7840-5060	24	---	X2	S5	625	Triode No. 1	{6EM7	6.3	7840-5060	13	---	X10	S5	425	Cap = G	
{6DN7	6.3	7810-2030	22	---	X10	S5	475	Triode No. 2	6EM7	6.3	7810-2030	60	---	SH	S1	500	Pent. Sect.	
6DQ3†	6.3	1C00-4070	0	78	SH	S3	400		6EN4	6.3	7200-5010	0	65	X2	S5	850	Diode Sect.	
6DQ4	6.3	7800-5030	0	45	SH	S3	650		{6EQ7	6.3	4520-7631	20	---	SH	S1	400		
6DQ5	6.3	7210-0430	65	---	X4	S5	450	Cap = P	6ER5	6.3	4500-8030	0	30	X10	S5	650		
6DQ6	6.3	7250-0480	36	---	X10	---	300	CAP = P, HOLD DOWN \$1 AND PRESS \$5	6ES5	6.3	4320-5670	11	---	X10	S5	550		
6DR4	6.3	3460-5070	14	---	X4	S5	200		6ES8	6.3	3420-5010	10	---	X10	S5	550		
{6DR7	6.3	4570-6080	13	---	X2	S5	375	Triode No. 1	6ES8	6.3	4572-6183	22	---	X10	S5	475	✕Dual Triode	
{6DR7	6.3	4520-1090	55	---	X4	S5	850	Triode No. 2	{6ET7	6.3	4570-9860	11	---	X10	S5	500	Pent. Sect.	
{6DS4†	6.3	3140-2080	9	---	X10	S4	600	USE ADAPTER SA-3, 1050-127	{6ET7	6.3	4500-3210	0	18	SH	S1	400	✕Dual Diode	
{Model 752A: No Adapter Required.									6EU7	6.3	2185-7694	14	---	X4	S5	200	✕Dual Triode	
{6DS4	6.3	AC40-2080	9	---	X10	S4	600		{6EU8	6.3	4570-1980	9	---	X4	S5	550	Pent. Sect.	
6DS5	6.3	4310-5620	14	---	X10	S5	375		6EU8	6.3	4520-3060	10	---	X10	S5	525	Triode Sect.	
6DT3†	6.3	1C00-4070	0	83	SH	S1	650		6EV5	6.3	3410-5620	10	---	X10	S5	550		
6DT4	6.3	7800-5030	0	68	SH	S3	650		6EV7	6.3	4572-6183	10	---	X10	S5	375	✕Dual Triode	
6DT5	6.3	4530-9170	22	---	X10	S5	325		6EW6	6.3	4310-5627	11	---	X4	S5	775		
{6DT6	6.3	4310-5627	12	---	X1	S5	375	Grid No. 1	{6EW7	6.3	4570-6080	34	---	X2	S5	650	Triode No. 1	
{6DT6	6.3	4370-5621	8	---	X1	S5	300	Grid No. 3	{6EW7	6.3	4520-1090	56	---	X10	S5	475	Triode No. 2	
6DT8	6.3	4572-6183	14	---	X4	S5	625	✕Dual Triode	6EX6	6.3	7250-0830	53	---	X10	S5	350	Cap = P	
6DU3†	6.3	1300-4070	0	62	SH	S3	650		Tubes indicating shorts: Re-test using 7250-0130									
6DV4†	6.3	AC60-1070	13	---	X10	S4	700	USE ADAPTER SA-4, 1050-144	6EY6	6.3	7250-3480	29	---	X4	S5	675		
{6DW4†	6.3	4500-2090	0	55	SH	S3	650		6EZ5	6.3	7250-3480	47	---	X2	S5	625		
{Model 752A: No Adapter Required.									{6EZ8	6.3	5497-8600	25	---	X4	S5	500	✕Dual Triode	
{6DX8	6.3	4580-6970	10	---	X10	S5	625	Pent. Sect.	6EZ8	6.3	5420-3010	15	---	X4	S5	500	Triode No. 3	
{6DX8	6.3	4510-2030	12	---	X4	S5	625	Triode Sect.	{6FA7	6.3	4570-9861	10	---	X2	S5	400		
6DZ4	6.3	3420-1050	12	---	X10	S4	500		{6FA7	6.3	4570-1869	10	---	X2	S5	400		
{6DZ7	6.3	7251-6480	10	---	X10	S5	600	Pent. No. 1	{6FA7	6.3	4590-3061	0	30	SH	S1	250	MAKE NO GAS TEST	
{6DZ7	6.3	7215-3480	10	---	X10	S5	600	Pent. No. 2	6FD6	6.3	3410-6572	19	35	SH	S1	650	Triode No. 1	
{6DZ8	6.3	4530-6720	25	---	X4	S5	725	Pent. Sect.	{6FD7	6.3	4570-6080	15	---	X2	S5	500	Triode No. 2	
{6DZ8	6.3	4510-9080	17	---	X2	S5	250	Triode Sect.	6FE5	6.3	4520-1090	60	---	X10	S5	475		
6EA4†	6.3	1C00-6050	0	50	SH	S1	500	Cap = G	6FE5	6.3	7250-3480	30	---	X10	S5	400		
6EA5	6.3	4310-5620	12	---	X10	S5	375		6FG7	6.3	3410-5670	10	---	X10	S5	300		
{6EA7	6.3	7840-5060	10	---	X2	S5	575	Triode No. 1	{6FG7	6.3	4590-6780	10	---	X4	S5	575	Pent. Sect.	
{6EA7	6.3	7810-2030	53	---	X10	S5	400	Triode No. 2	6FG7	6.3	4510-2030	14	---	X10	S5	475	Triode Sect.	
{6EA8	6.3	4520-6370	9	---	X4	S5	550	Pent. Sect.	6FH5	6.3	3420-5070	12	---	X10	S5	550		
{6EA8	6.3	4590-1080	10	---	X10	S5	525	Triode Sect.	{6FH8	6.3	5460-9700	28	---	X4	S5	400	TETRODE PLATE No. 1	
6EB5	6.3	4300-2751	0	71	SH	S1	400	✕Dual Diode	{6FH8	6.3	5460-8700	25	---	X2	S5	400	TETRODE PLATE No. 2	
{6EB8	6.3	4570-9860	0	---	X10	S5	625	Pent. Sect.	{6FH8	6.3	5460-1700	25	---	X2	S5	400	TETRODE PLATE No. 3	
{6EB8	6.3	4520-3010	10	---	X2	S5	625	Triode Sect.	{6FH8	6.3	5420-3000	31	---	X10	S5	350	Triode Sect.	
6EF4†	6.3	1C00-6059	0	65	SH	S1	500	Cap = G	{6FJ7†	6.3	1CA0-B090	20	---	X2	S5	775	Triode No. 1	
6EH4†	6.3	1C00-6050	0	50	SH	S1	500	Cap = G	{6FJ7	6.3	1C30-5070	18	---	X10	S5	575	Triode No. 2	
6EH5	6.3	4320-7610	13	---	X10	S5	450	Cap = G	{6FM7†	6.3	1CA0-B090	20	---	X2	S5	300	Triode No. 1	
	6.3	4320-7610	13	---	X10	S5	450		{6FM7	6.3	1C80-5070	61	---	X4	S5	725	Triode No. 2	



TUBE TYPE	FIL	SELECTORS	BIAS	SHUNT	MULT	PRESS	MINIMUM MUT COND	NOTATIONS	TUBE TYPE	FIL	SELECTORS	BIAS	SHUNT	MULT	PRESS	MINIMUM MUT COND	NOTATIONS
{6FM8	6.3	4580-9070	15	---	X4	S5	175	Triode Sect.	6GW6	6.3	2750-0480	31	---	X10	---	450	CAP=P. HOLD DOWN S1
{6FM8	6.3	4500-6213	0	78	SH	S1	400	xDual Diode	{6GW8	6.3	4580-6370	11	---	X10	S5	500	Pent. Sect.
6FQ5	6.3	4320-5070	14	---	X10	S5	650		{6GW8	6.3	4510-9020	10	---	X2	S5	325	Triode Sect.
6FQ5A	6.3	4320-5076	14	---	X10	S5	750		6GX6	6.3	3410-5627	13	---	X2	S5	575	
6FQ7	6.3	4572-6183	23	---	X4	S5	400	xDual Triode	{6GX7	6.3	4520-6710	11	---	X10	S5	450	Pent. Sect.
6FS5	6.3	4310-5670	10	---	X10	S5	500		{6GX7	6.3	4590-8010	15	---	X10	S5	600	Triode Sect.
6FV6	6.3	4310-5672	14	---	X10	S5	375		6GY5†	6.3	1C50-07A0	32	---	X10	---	675	CAP=P. HOLD DOWN S1 AND PRESS S5
{6FV8	6.3	4590-6780	10	---	X4	S5	550	Pent. Sect.	6GY6	6.3	3410-5627	15	---	X2	---	450	
{6FV8	6.3	4510-2030	15	---	X10	S5	450	Triode Sect.	{6GY8	6.3	4500-6070	0	76	SH	S1	400	Triode No. 1
6FW5	6.3	2710-5830	50	---	X10	S5	325		{6GY8	6.3	5430-9080	21	---	X2	S5	375	Triode No. 2
{6FY7†	6.3	1CA0-B090	21	---	X2	S5	225	Triode No. 1	{6GY8	6.3	5410-2000	30	---	X2	S5	400	Triode No. 3
{6FY7	6.3	1C30-5070	59	---	X4	S5	475	Triode No. 2	6GZ5	6.3	4320-7610	21	---	X4	S5	750	
{6FY8	6.3	4530-6720	32	---	X10	S5	275	Pent. Sect.	6HA5	6.3	4310-5076	17	---	X10	S5	475	
{6FY8	6.3	4510-9080	21	---	X2	S5	475	Triode Sect.	6HA6	6.3	4520-7613	11	---	X20	S5	400	
6G11†	6.3	1C80-BA90	39	---	X4	S5	650	Pent. No. 1	6HB5†	6.3	1CB0-72A0	59	---	X4	S5	625	
{6G11	6.3	1C30-6724	20	---	X2	S5	150	Pent. No. 2	6HB6	6.3	4520-7819	10	---	X20	S5	450	
{6GA7†	6.3	1C40-7350	49	---	X4	S5	700	Pent. Sect.	{6HB7	6.3	4520-6710	12	---	X4	S5	575	
{6GA7	6.3	1C00-B080	0	43	SH	S3	400	Diode Sect.	{6HB7	6.3	4590-8010	12	---	X20	S5	300	Pent. Sect.
6GB5	6.3	4520-0780	73	---	X4	S5	400	CAP=P. USE ADAPTER SA-4, 1050-168 HOLD DOWN S1 AND PRESS S5	6H-B25	6.3	4520-0798	45	---	X10	S5	350	Triode Sect.
6GC5	6.3	4560-9170	25	---	X10	---	375		{6HC8	6.3	4530-6720	17	---	X4	S5	700	Pent. Sect.
6GE5†	6.3	1CB0-72A0	50	---	X10	S5	300	Pent. Sect.	{6HC8	6.3	4510-9080	10	---	X2	S5	600	Triode Sect.
{6GE8	6.3	4580-9170	15	---	X2	S5	650	Triode Sect.	6HD5†	6.3	1CB0-79A0	52	---	X10	S5	400	
{6GE8	6.3	4530-6020	68	---	X4	S5	550		{6HD7	6.3	4520-6710	10	---	X4	S5	525	Pent. Sect.
6GF5†	6.3	1CB0-72A0	59	---	X4	S5	625		{6HD7	6.3	4590-8030	18	---	X10	S5	525	Triode Sect.
{6GF7†	6.3	4590-8010	20	---	X2	S5	250	Triode No. 1	6HE5†	6.3	1C90-6AB0	29	---	X4	S5	750	
6GF7	6.3	4520-6030	64	---	X10	S5	450	Triode No. 2	{6HE7†	6.3	1C90-5B80	58	---	X10	S5	200	Pent. Sect.
{Model 752A:	No Adapter Required.								{6HE7	6.3	1C00-2040	0	85	SH	S1	500	Diode Sect.
{6GH8	6.3	4520-6370	11	---	X4	S5	625	Pent. Sect.	6HF5†	6.3	1C90-0BA0	70	---	X4	S5	500	Cap=P
{6GH8	6.3	4590-1080	13	---	X10	S5	525	Triode Sect.	{6HF8	6.3	4570-9860	11	---	X10	S5	475	Pent. Sect.
{6GJ5†	6.3	4560-0730	31	---	X10	---	450	{CAP=P. HOLD DOWN S1 AND PRESS S5 USE ADAPTER SA-4, 1050-144	{6HF8	6.3	4520-3010	15	---	X4	S5	500	Triode Sect.
{Model 752A:	No Adapter Required.								6HG5	6.3	3410-5620	20	---	X4	S5	550	
{6GJ7	6.3	5420-6710	10	---	X10	S5	475	Pent. Sect.	{6HG8	6.3	4520-8930	11	---	X10	S5	475	Pent. Sect.
{6GJ7	6.3	5490-8030	29	---	X10	S5	550	Triode Sect.	{6HG8	6.3	4560-7030	33	---	X10	S5	350	Triode Sect.
{6GJ8	6.3	4520-6370	10	---	X4	S5	625	Pent. Sect.	6HJ5†	6.3	1CB0-792A	53	---	X10	S5	350	
{6GJ8	6.3	4590-1080	10	---	X10	S5	550	Triode Sect.	{6HJ7	6.3	4520-6710	11	---	X10	S5	525	Pent. Sect.
6GK5	6.3	3420-5076	14	---	X10	S5	750		{6HJ7	6.3	4590-8030	18	---	X10	S5	525	Triode Sect.
6GK6	6.3	4520-7813	10	---	X10	S5	575		{6HJ8	6.3	4520-6319	10	---	X10	S5	375	Pent. Sect.
{6GL7	6.3	7840-5060	15	---	X1	S5	450	Triode No. 1	{6HJ8	6.3	4500-8070	0	79	SH	S1	400	Diode Sect.
{6GL7	6.3	7810-2030	60	---	X10	S5	625	Triode No. 2	6HK5	6.3	4310-5020	13	---	X10	S5	920	
6GM5	6.3	4560-9170	10	---	X10	S5	500		6HL5	6.3	4520-7930	21	---	X10	S5	625	
6GM6	6.3	4310-5627	10	---	X10	S5	575		{6HL8	6.3	4520-6370	11	---	X10	S5	500	Pent. Sect.
{6GN8	6.3	4570-9860	15	---	X10	S5	500	Triode Sect.	{6HL8	6.3	4590-1080	17	---	X10	S5	400	Triode Sect.
{6GN8	6.3	4520-3010	16	---	X2	S5	450	Pent. Sect.	6HM5	6.3	4310-5076	17	---	X10	S5	475	
{6GQ7	6.3	4500-8697	0	80	SH	S1	400	Triode Sect.	6HM6	6.3	4520-7819	10	---	X10	S5	625	
{6GQ7	6.3	4500-2010	0	80	SH	S1	400	DIODES NO. 1 AND NO. 2 Diode No. 3	6HO5	6.3	4310-5076	14	---	X20	S5	450	
{6GT5†	6.3	4560-9730	31	---	X10	---	450	HOLD DOWN S1 AND PRESS S5 USE ADAPTER SA-4, 1050-144	6HR5	6.3	3410-5620	10	---	X4	S5	375	
{Model 752A:	No Adapter Required.								6HR6	6.3	4310-5672	10	---	X10	S5	300	
6GU5	6.3	4310-5620	9	---	X20	S5	650		6HS5†	6.3	4310-7043	0	---	X20	S5	500	
6GU7	6.3	4572-6183	33	---	X4	S5	400	xDual Triode	6HS6	6.3	4310-5672	15	---	X4	S5	650	
6GV5†	6.3	1C90-0BA0	48	---	X10	S5	350	Cap=P									

TUBE TYPE	FIL	SELECTORS	BIAS	SHUNT	MULT	PRESS	MINIMUM MUT COND	NOTATIONS
{6HS8	6.3	4570-8219	10	---	X1	S5	325	Pent. No. 1
{6HS8	6.3	4570-3216	10	---	X1	S5	325	Pent. No. 2
6HT6	6.3	4520-7819	10	---	X10	S5	500	
6HV5†	6.3	1C70-2043	0	78	SH	S1	750	
{6HW8	6.3	4560-2379	14	---	X2	S5	700	
Make external connection from Pin 8 of octal socket to plate jack and connect Pin 1 to Pin 7 on octal socket.								
6HZ5†	6.3	1C20-7043	0	---	X20	S5	500	
6HZ6	6.3	3410-5627	10	---	X2	S5	450	
{6HZ8	6.3	4570-9860	12	---	X10	S5	500	Pent. Sect.
{6HZ8	6.3	4520-3010	15	---	X4	S5	550	Triode Sect.
6J4	6.3	4310-7020	15	---	X20	S5	350	
6J6	6.3	4356-2170	17	---	X10	S5	325	xDual Triode
{6J9†	6.3	4579-86A0	15	---	X4	S5	750	XTriodes No. 1&2
{6J9	6.3	4520-1030	15	---	X4	S5	750	Triode No. 3
{6J10†	6.3	1C70-4685	0	---	X1	S5	500	Pent. No. 1
{6J10	6.3	1CB0-9230	20	---	X10	S5	375	Pent. No. 2
{6J11†	6.3	1CB0-978A	12	---	X4	S5	800	Pent. No. 1
{6J11	6.3	1C50-3264	12	---	X4	S5	800	Pent. No. 2
6JA5†	6.3	1C90-6AB0	35	---	X10	S5	375	
6JB5†	6.3	1C90-6AB0	47	---	X2	S5	625	
{6JB6†	6.3	4520-0138	31	---	X10	---	450	{CAP-P, HOLD DOWN ST AND PRESS S5 (USE ADAPTER SA-4, 1050-144
{Model 752A:	No Adapter Required.							
{6JB8	6.3	4520-6370	26	---	X2	S5	325	Pent. Sect.
{6JB8	6.3	4590-1080	23	---	X4	S5	350	Triode Sect.
6JC5†	6.3	1C90-6AB0	29	---	X4	S5	750	
6JC6	6.3	4520-7819	10	---	X10	S5	625	
{6JC8	6.3	4520-6370	10	---	X4	S5	600	Pent. Sect.
{6JC8	6.3	4580-9010	10	---	X10	S5	500	Triode Sect.
6JD5†	6.3	1C20-7043	0	---	X20	S5	500	
6JD6	6.3	4520-7819	11	---	X10	S5	550	
{6JE6†	6.3	4520-0738	42	---	X10	---	575	{CAP-P, HOLD DOWN ST AND PRESS S5 (USE ADAPTER SA-4, 1050-144
{Model 752A:	No Adapter Required.							
{6JE8	6.3	4570-9860	15	---	X10	S5	470	Pent. Sect.
{6JE8	6.3	4520-3010	14	---	X4	S5	625	Triode Sect.
{6JF6†	6.3	4520-0738	36	---	X10	---	550	{CAP-P, HOLD DOWN ST AND PRESS S5 (USE ADAPTER SA-4, 1050-144
{Model 752A:	No Adapter Required.							
{6JF8	6.3	7150-0460	36	---	X10	---	325	PENT. SECT. CAP-P, HOLD DOWN ST AND PRESS S5
6JF8	6.3	7100-8020	0	46	SH	S3	625	Diode Sect.
6JG5	6.3	4570-9860	15	---	X10	S5	500	
{6JG6†	6.3	4520-9736	36	---	X10	---	550	HOLD DOWN ST AND PRESS S5 USE ADAPTER SA-4, 1050-144
{Model 752A:	No Adapter Required.							
6JH5†	6.3	1C20-7043	0	---	X20	S5	500	
6JH6	6.3	4310-5627	12	---	X10	S5	375	
6JH8	6.3	4560-9371	16	---	X1	S5	400	{PLATE NO. 1. DISREGARD NEON FLASH IN SHORT TESTING
6JH8	6.3	4560-8371	16	---	X1	S5	400	{PLATE NO. 2. DISREGARD NEON FLASH IN SHORT TESTING
6JK5†	6.3	1C20-7043	0	---	X20	S5	500	



TUBE TYPE	FIL	SELECTORS	BIAS	SHUNT	MULT	PRESS	MINIMUM MUT COND	NOTATIONS
6KM8	6.3	4570-9860	5	---	X1	---	650	{TETRODE PLATE NO. 1 HOLD DOWN S1 AND PRESS S5. {TETRODE PLATE NO. 2 HOLD DOWN S1 AND PRESS S5. {TETRODE PLATE NO. 3 HOLD DOWN S1 AND PRESS S5
6KM8	6.3	4570-2860	5	---	X1	---	650	
6KM8	6.3	4570-1860	5	---	X1	---	650	
6KM8	6.3	4500-3060	0	36	SH	S1	400	Diode Sect.
6KN6†	6.3	1C50-0324	68	---	X4	S5	500	Cap=P
6KR8	6.3	4570-9860	14	---	X10	S5	475	Pent. Sect.
6KR8	6.3	4520-3010	11	---	X10	S5	500	Triode Sect.
6KS6	6.3	4320-7516	0	---	X1	S5	500	LIMITER GRID
6KS6	6.3	4360-7512	0	---	X1	S5	525	QUADRATURE GRID
6KT6	6.3	4520-7819	9	---	X10	S5	750	
6KT8	6.3	4570-9860	10	---	X10	S5	450	
6KT8	6.3	4520-3010	20	---	X2	S5	475	Pent. Sect.
6KU8	6.3	4570-9860	15	---	X10	S5	600	Triode Sect.
6KU8	6.3	4500-3010	0	30	SH	S1	400	Diode No. 1
6KU8	6.3	4500-2010	0	30	SH	S1	400	Diode No. 2
6KV6†	6.3	4520-9736	65	---	X4	S5	760	USE ADAPTER SA-4, 1050-144
Model 752A:		No Adapter Required.						
6KV8	6.3	4570-9860	15	---	X20	S5	425	Pent. Sect.
6KV8	6.3	4520-3010	15	---	X4	S5	550	Triode Sect.
6KX8	6.3	4591-7382	14	---	X4	S5	200	xDual Triode
6KY6	6.3	4520-7813	13	---	X20	S5	475	
6KY8†	6.3	4520-6730	42	---	X10	S5	325	PENT. SECT. USE ADAPTER SA-4, 1050-144
6KY8	6.3	4590-8010	18	---	X4	S5	200	Triode Sect.
Model 752A:		No Adapter Required.						
6KZ8	6.3	4520-6730	14	---	X4	S5	625	Pent. Sect.
6KZ8	6.3	4590-1080	18	---	X10	S5	400	Triode Sect.
6L6	6.3	7250-3481	17	---	X10	S4	750	Cap=P
6LB6†	6.3	1C50-0324	33	---	X10	S5	550	Pent. Sect.
6LB8	6.3	4570-9860	16	---	X10	S5	350	Triode Sect.
6LB8	6.3	4520-3010	17	---	SH	S1	500	Cap=G
6LC6	6.3	2700-5601	0	50	X2	S5	625	Pent. Sect.
6LC8	6.3	4560-9873	14	---	X2	S5	625	Triode Sect.
6LC8	6.3	4520-1030	19	---	X2	S5	625	
6LD6	6.3	4520-7819	13	---	X10	S5	840	
6LE8	6.3	4590-6837	12	---	X2	S5	450	Pent. No. 1
6LE8	6.3	4590-1832	12	---	X2	S5	450	Pent. No. 2
6LF6†	6.3	1C50-0324	77	---	X4	S5	750	Cap=P
6LF8	6.3	4570-9860	11	---	X10	S5	475	Pent. Sect.
6LF8	6.3	4520-3010	16	---	X4	S5	500	Triode Sect.
6LG6†	6.3	1C50-0840	73	---	X10	S5	420	Cap=P
6LH6	6.3	2700-5061	0	50	SH	S1	500	Cap=G
6LJ6	6.3	2700-5063	0	50	SH	S1	500	Cap=G
6LJ8	6.3	4590-6780	10	---	X10	S5	625	Pent. Sect.
6LJ8	6.3	4510-2030	10	---	X10	S5	500	Triode Sect.
6LM8	6.3	4520-6370	15	---	X4	S5	550	Pent. Sect.
6LM8	6.3	4590-1080	17	---	X10	S5	450	Triode Sect.
6LN8	6.3	4520-6371	12	---	X4	S5	625	Pent. Sect.
6LN8	6.3	4590-1086	26	---	X4	S5	675	Triode Sect.

TUBE TYPE	FIL	SELECTORS	BIAS	SHUNT	MULT	PRESS	MINIMUM MUT COND	NOTATIONS
{6MQ8	6.3	4520-6370	10	---	X10	S5	450	Pent. Sect.
{6MQ8	6.3	4590-1080	10	---	X10	S5	600	Triode Sect.
{6MU8	6.3	4520-6370	15	---	X10	S5	460	Pent. Sect.
{6MU8	6.3	4590-1080	15	---	X10	S5	440	Triode Sect.
{6MV8	6.3	4570-9860	15	---	X4	S5	700	Pent. Sect.
{6MV8	6.3	4520-3010	15	---	X4	S5	440	Triode Sect.
{6MY8†	6.3	1C60-4890	40	---	X10	S5	350	Pent. Sect.
{6MY8	6.3	1CA0-20B0	21	---	X4	S5	350	Triode Sect.
{6Q11†	6.3	1CA0-A048	25	---	X2	S5	675	Triode No. 1
{6Q11	6.3	1C7B-5263	14	---	X4	S5	200	XDual Triode
6R4	6.3	4510-8030	28	---	X4	S5	625	
6S4	6.3	4560-9020	21	---	X4	S5	700	
6SN7	6.3	7841-5263	23	---	X4	S5	400	XDual Triode
6T4	6.3	4320-1050	16	---	X10	S4	400	
{6T8	6.3	4580-9076	15	---	X4	S5	175	Triode Sect.
{6T8	6.3	4500-6273	0	78	SH	S1	400	XDual Diode
{6T9†	6.3	4500-1078	0	78	SH	S1	400	Diode No. 3
{6T9	6.3	1C80-BA90	12	---	X10	S5	450	Pent. Sect.
{6T10†	6.3	1C40-2050	16	---	X4	S5	200	Triode Sect.
{6T10	6.3	1C80-BA90	20	---	X10	S5	375	Pent. No. 1
{6T10	6.3	1C30-7625	15	---	X2	S5	200	Pent. No. 2
{6U8	6.3	4520-6370	12	---	X4	S5	475	Pent. Sect.
{6U8	6.3	4590-1080	10	---	X10	S5	525	Triode Sect.
{6U9†	6.3	5630-7824	14	---	X10	S5	375	PENT. SECT. USE ADAPTER SA-11, 1050-177.
{6U9	6.3	56A0-9010	30	---	X10	S5	300	Triode Sect.
{6U10†	6.3	1C9B-A243	27	---	X2	S5	625	TRIODES NO. 1 AND 3
{6U10	6.3	1C70-5060	20	---	X2	S5	175	Triode No. 2
{6V3	OFF	4500-0000	Use This Setting For Short	---	SH	S5	650	Check Only.
{6V3	6.3	4500-0020	0	60	SH	---	650	(CAP. SHORT ON 1-2-3-4 HOLD DOWN S7 AND PRESS S3)
{Model 752A:								Cap = K
{6V3	6.3	4500-2000	0	60	SH	S3	650	
{6V5	6.3	7850-3400	46	---	X4	S5	650	
{6V6	6.3	7250-3481	18	---	X4	S5	575	
{6V9†	6.3	5630-7412	15	---	X1	---	700	
{6V9	6.3	5680-A090	23	---	X4	S5	650	Triode Sect.
6W4	6.3	7800-5030	0	60	SH	S3	650	HOLD DOWN S1 AND PRESS S5
6W6	6.3	7250-3480	25	---	X10	---	375	XDual Diode
6X4	6.3	4300-6170	0	18	SH	S3	650	XDual Diode
6X5	6.3	7200-5381	0	20	SH	S3	650	Eyes Open
{6X6	6.3	2753-4086	100	100	SH	S6	---	Eyes Closed
{6X6	6.3	2750-4386	100	100	SH	S6	---	Pent. Sect.
{6X8	6.3	4570-9861	10	---	X4	S5	725	Triode Sect.
{6X8	6.3	4520-3061	15	---	X10	S5	350	Pent. Sect.
{6X9†	6.3	5630-7824	15	---	X10	S5	375	PENT. SECT. USE ADAPTER SA-11, 1050-177.
{6X9	6.3	56A0-9010	14	---	X4	S5	750	Triode Sect.
{6Y9†	6.3	5680-A970	16	---	X10	S5	650	PENT. NO. 1. USE ADAPTER SA-11, 1050-177.
{6Y9	6.3	5610-4320	12	---	X10	S5	450	Pent. No. 2
{6Y10†	6.3	1C80-BA90	21	---	X4	S5	750	Pent. No. 1
{6Y10	6.3	1C30-7625	13	---	X2	S5	575	Pent. No. 2
6Z4	6.3	5100-3240	0	35	SH	S3	650	XDual Diode



TUBE TYPE	FIL	SELECTORS	BIAS	SHUNT	MULT	PRESS	MINIMUM MUT COND	NOTATIONS	TUBE TYPE	FIL	SELECTORS	BIAS	SHUNT	MULT	PRESS	MINIMUM MUT COND	NOTATIONS
{8CM7	7.5	4570-6030	27	---	X4	S5	300	Triode No. 1	{9EA8	10.0	4520-6370	9	---	X4	S5	550	Pent. Sect.
{8CM7	7.5	4580-1090	23	---	X10	S5	325	Triode No. 2	{9EA8	10.0	4590-1080	10	---	X10	S5	525	Triode Sect.
{8CN7	7.5	4570-8060	15	---	X4	S5	275	Triode Sect.	{9GH8	10.0	4520-6370	11	---	X4	S5	625	Pent. Sect.
{8CN7	7.5	4500-2130	0	78	SH	S1	400	xDual Diode	{9GH8	10.0	4590-1080	13	---	X10	S5	525	Triode Sect.
{8CS7	7.5	4570-6080	22	---	X4	S5	350	Triode No. 1	{9JW8	10.0	4520-6370	14	---	X4	S5	775	Pent. Sect.
{8CS7	7.5	4530-1090	26	---	X10	S5	275	Triode No. 2	{9JW8	10.0	4590-1080	13	---	X4	S5	550	Triode Sect.
{8CW5	7.5	4520-7930	16	---	X10	S5	475		{9KC6	7.5	4520-7916	10	---	X10	S5	550	
{8CX8	7.5	4570-9860	11	---	X10	S5	400	Pent. Sect.	{9KX6	7.5	4520-7813	11	---	X20	S5	475	
{8CX8	7.5	4520-3010	13	---	X4	S5	675	Triode Sect.	{9KZ8	10.0	4520-6730	14	---	X4	S5	625	Pent. Sect.
{8EB8	7.5	4570-9860	0	---	X10	S5	625	Triode Sect.	{9KZ8	10.0	4590-1080	18	---	X10	S5	400	Triode Sect.
{8EB8	7.5	4520-3010	10	---	X2	S5	625	Triode Sect.	{9LA6	7.5	4520-7813	14	---	X10	S5	575	
{8EM5	7.5	4530-9170	16	---	X10	S5	325		{9ML8	10.0	4568-3270	15	---	X10	S5	470	
{8ET7	7.5	4570-9860	11	---	X10	S5	500	Pent. Sect.	{9ML8	10.0	4590-1070	15	---	X10	S5	470	xDual Triode
{8ET7	7.5	4500-3210	0	18	SH	S1	400	xDual Diode	{9MN8†	10.0	1C80-6030	21	---	X4	S5	650	Triode No. 3
{8FO7	7.5	4572-6183	23	---	X4	S5	400	xDual Triode	{9MN8	10.0	1CAB-4230	21	---	X4	S5	650	Triode No. 1
{8GK6	7.5	4520-7813	10	---	X10	S5	575		{9R-AL1	10.0	4570-6080	33	---	X2	S5	670	xDual Triode
{8GN8	7.5	4570-9860	15	---	X10	S5	500	Pent. Sect.	{9R-AL1	10.0	4530-1090	36	---	X4	S5	670	Triode No. 1
{8GN8	7.5	4520-3010	16	---	X2	S5	450	Triode Sect.	{9V9†	10.0	5630-7412	15	---	X1	---	700	Triode No. 2
{8GU7	7.5	4572-6183	33	---	X4	S5	400	xDual Triode	{9V9	10.0	5680-A090	23	---	X4	S5	650	HEPT. SECT. HOLD DOWN {S1 AND PRESS S5. USE ADAPTER SA-11, 1050-177.
{8GX7	7.5	4520-6710	11	---	X10	S5	450	Pent. Sect.	{10AL11†	10.0	1C80-BA90	19	---	X10	S5	400	Triode Sect.
{8GX7	7.5	4590-8010	15	---	X10	S5	600	Triode Sect.	{10AL11	10.0	1C30-6724	22	---	X2	S5	300	Pent. No. 1
{8JL8	7.5	4570-9860	14	---	X10	S5	500	Pent. Sect.	{10BQ5	10.0	4520-7930	14	---	X10	S5	475	Pent. No. 2
{8JL8	7.5	4520-3010	18	---	X4	S5	700	Triode Sect.	{10CW5	10.0	4520-7930	16	---	X10	S5	475	
{8JU8	7.5	4500-2839	0	78	SH	S1	400	xDiode 1 and 3	{10DE7	10.0	4570-6080	30	---	X2	S5	625	Triode No. 1
{8JU8	7.5	4500-1728	0	78	SH	S1	400	xDiode 2 and 4	{10DE7	10.0	4520-1090	55	---	X4	S5	775	Triode No. 2
{8JV8	7.5	4570-9860	13	---	X10	S5	450	Pent. Sect.	{10DR7	10.0	4570-6080	13	---	X2	S5	375	Triode No. 1
{8JV8	7.5	4520-3010	17	---	X4	S5	450	Triode Sect.	{10DR7	10.0	4520-1090	55	---	X4	S5	850	Triode No. 2
{8K11†	7.5	1C90-A048	25	---	X2	S5	675	Triode No. 1	{10EG7	10.0	7840-5060	29	---	X2	S5	625	Triode No. 1
{8K11	7.5	1C7B-5263	14	---	X4	S5	200	xDual Triode	{10EG7	10.0	7810-2030	55	---	X10	S5	475	Triode No. 2
{8KA8	7.5	4560-9837	14	---	X2	S5	625	Pent. Sect.	{10EM7	10.0	7840-5060	13	---	X2	S5	500	Triode No. 1
{8KA8	7.5	4520-1030	19	---	X2	S5	625	Triode Sect.	{10EM7	10.0	7810-2030	60	---	X10	S5	425	Triode No. 2
{8KR8	7.5	4570-9860	14	---	X10	S5	475	Pent. Sect.	{10GF7†	10.0	4590-8010	20	---	X2	S5	250	TRIODE NO. 1 USE ADAPTER SA-4, 1050-144
{8KR8	7.5	4520-3010	11	---	X10	S5	500	Triode Sect.	{10GF7	10.0	4520-6030	64	---	X10	S5	450	Triode No. 2
{8LC8	7.5	4560-9873	14	---	X2	S5	625	Pent. Sect.	{Model 752A: No Adapter Required.								
{8LC8	7.5	4520-1030	19	---	X2	S5	625	Triode Sect.	{10GK6	10.0	4520-7813	10	---	X10	S5	575	Pent. Sect.
{8LT8	7.5	4590-3216	10	---	X10	S5	450	Pent. Sect.	{10GN8	10.0	4570-9860	15	---	X10	S5	500	Triode Sect.
{8LT8	7.5	4500-6870	0	80	SH	S1	650	xDual Diode	{10GN8	10.0	4520-3010	16	---	X2	S5	450	Pent. Sect.
{8MU8	7.5	4520-6370	15	---	X10	S5	460	Pent. Sect.	{10J10†	10.0	1C70-4685	0	---	X1	S5	500	Triode Sect.
{8MU8	7.5	4590-1080	15	---	X10	S5	440	Triode Sect.	{10J10	10.0	1C80-9230	20	---	X10	S5	375	Pent. No. 1
{8MU8	7.5	4590-1080	15	---	X10	S5	440	Triode Sect.	{10JA5†	10.0	1C90-6AB0	35	---	X10	S5	375	Pent. No. 2
{8U9†	7.5	5630-7824	14	---	X10	S5	375	PENT. SECT. USE ADAPTER SA-11, 1050-177.	{10JA8	10.0	4570-9860	12	---	X10	S5	525	Tetrode Sect.
{8U9	7.5	56A0-9010	30	---	X10	S5	300	Triode Sect.	{10JA8	10.0	4520-3010	23	---	X2	S5	475	Triode Sect.
{8X9†	7.5	5630-7824	15	---	X10	S5	375	Triode Sect.	{10HF8	10.0	4570-9860	11	---	X10	S5	475	Pent. Sect.
{8X9	7.5	56A0-9010	14	---	X10	S5	375	PENT. SECT. USE ADAPTER SA-11, 1050-177.	{10HF8	10.0	4520-3010	15	---	X4	S5	500	Triode Sect.
{9AH9†	10.0	1C50-B879	15	---	X4	S5	750	Triode Sect.	{10J10†	10.0	1C70-4685	0	---	X1	S5	500	Pent. No. 1
{9AH9	10.0	1C20-3040	29	---	X10	S5	750	Pent. Sect.	{10J10	10.0	1C80-9230	20	---	X10	S5	375	Pent. No. 2
{9AK10†	10.0	1C90-A040	17	---	X4	S5	625	Triode Sect.	{10JA5†	10.0	1C90-6AB0	35	---	X10	S5	375	
{9AK10	10.0	1C70-5060	17	---	X4	S5	725	Triode No. 1	{10JA8	10.0	4570-9860	12	---	X10	S5	525	Triode Sect.
{9AK10	10.0	1C80-2030	17	---	X4	S5	725	Triode No. 2	{10JA8	10.0	4520-3010	23	---	X2	S5	475	Triode Sect.
{9AK10	10.0	1C80-2030	17	---	X4	S5	725	Triode No. 3	{10JT8	10.0	4570-9860	15	---	X10	S5	550	Pent. Sect.
{9AU7	10.0	4572-6183	25	---	X2	S5	675	xDual Triode	{10JT8	10.0	4520-3010	21	---	X2	S5	250	Triode Sect.
{9BJ11†	10.0	1C80-79A8	10	---	X2	S5	500	Pent. No. 1	{10JY8	10.0	4570-9860	15	---	X10	S5	500	Pent. Sect.
{9BJ11	10.0	1C60-2354	11	---	X10	S5	450	Pent. No. 2	{10JY8	10.0	4520-3010	14	---	X10	S5	625	Triode Sect.

TUBE TYPE	FL	SELECTORS	BIAS	SHUNT	MULT	PRESS	MINIMUM MUT COND	NOTATIONS
{10KR8	10.0	4570-9860	14	---	X10	S5	475	Pent. Sect.
{10KR8	10.0	4520-3010	11	---	X10	S5	500	Triode Sect.
{10KU8	10.0	4570-9860	15	---	X10	S5	600	Pent. Sect.
{10KU8	10.0	4500-3010	0	30	SH	S1	400	Diode No. 1
{10KU8	10.0	4500-2010	0	30	SH	S1	400	Diode No. 2
{10LB8	10.0	4570-9860	16	---	X10	S5	550	Pent. Sect.
{10LB8	10.0	4520-3010	17	---	X10	S5	350	Triode Sect.
{10LD6	10.0	4520-7819	13	---	X10	S5	840	
{10LE8	10.0	4590-6837	12	---	X2	S5	450	Pent. No. 1
{10LE8	10.0	4590-1832	12	---	X2	S5	450	Pent. No. 2
{10LW8	10.0	4570-9860	15	---	X10	S5	600	Pent. Sect.
{10LW8	10.0	4520-3010	18	---	X4	S5	350	Triode Sect.
{10LY8	10.0	4570-9860	21	---	X10	S5	450	Pent. Sect.
{10LY8	10.0	4520-3010	17	---	X2	S5	400	Triode Sect.
{10LZ8	10.0	4570-9860	11	---	X10	S5	375	Pent. Sect.
{10LZ8	10.0	4520-3010	17	---	X4	S5	150	Triode Sect.
{10T10†	10.0	1C80-BA90	20	---	X10	S5	375	Pent. No. 1
{10T10	10.0	1C30-7625	15	---	X2	S5	200	Pent. No. 2
{10Z10†	10.0	1C70-4685	0	---	X1	S5	500	Pent. No. 1
{10Z10	10.0	1C80-9230	20	---	X10	S5	375	Pent. No. 2
{10WP7	6.3	7230-5084	0	75	SH	S1	650	EMISSION TEST
{10WP7	6.3	7250-3084	#	0	SH	S6	---	GRID CONTROL & BIAS TEST
# Hold down S6 and rotate bias dial. Meter pointer should move up and down scale if grid is operating.								
Gas Test: Adjust bias until meter reads one small division.								
Hold down S6 and press S7. If meter pointer moves up scale more than one division, tube is gassy. Use Hickok Adapter								
Code No. 1050-28								
{11AF9†	12.6	5680-A970	16	---	X10	S5	650	PENT. NO. 1. USE ADAPTER SA-11, 1050-177
{11AF9	12.6	5610-4320	12	---	X10	S5	450	Pent. No. 2
{11AR11†	12.6	1CA0-89B7	5	---	X10	S5	525	PENT. NO. 1 SET "LINE ADJUST" TO 823
{11AR11	12.6	1C50-2364	5	---	X10	S5	525	Pent. No. 2
{11BQ11†	12.6	1CA0-89B7	10	---	X10	S5	350	PENT. NO. 1. SET "LINE ADJUST" TO 86 ON 200 SCALE
{11BQ11	12.6	1C50-2364	10	---	X10	S5	375	Pent. No. 2
{11BT11†	10.0	1CB0-2A86	10	---	X20	S5	475	Pent. Sect.
{11BT11	10.0	1C50-7060	12	---	X4	S5	850	Triode No. 1
{11BT11	10.0	1C30-9040	20	---	X4	S5	750	Triode No. 2
{11CA11†	10.0	1C80-BA97	22	---	X4	S5	750	Pent. Sect.
{11CA11	10.0	1C60-4050	14	---	X4	S5	750	Triode No. 1
{11CA11	10.0	1C30-2070	14	---	X4	S5	700	Triode No. 2
{11CF11†	10.0	1C50-3460	10	---	X10	S5	825	Pent. Sect.
{11CF11	10.0	1C90-A080	12	---	X10	S5	350	Triode No. 1
{11CF11	10.0	1CB0-2070	13	---	X10	S5	400	Triode No. 2
{11CY7	10.0	4570-6080	13	---	X4	S5	200	Triode No. 1
{11CY7	10.0	4520-1090	60	---	X4	S5	625	Triode No. 2
{11DS5	12.6	4310-5620	14	---	X10	S5	600	SET "LINE ADJUST" TO 86 ON 200 SCALE
{11FY7†	10.0	1CA0-B090	21	---	X2	S5	225	Triode No. 1
{11FY7	10.0	1C30-5070	59	---	X4	S5	475	Triode No. 2
{11HM7	10.0	4520-7819	10	---	X20	S5	500	
{11JE8	10.0	4570-9860	15	---	X10	S5	475	Pent. Sect.
{11JE8	10.0	4520-3010	14	---	X4	S5	625	Triode Sect.
{11KV8	10.0	4570-9860	15	---	X20	S5	425	Pent. Sect.
{11KV8	10.0	4520-3010	15	---	X4	S5	550	Triode Sect.
{11LQ8	10.0	4570-9860	15	---	X20	S5	425	Pent. Sect.
{11LQ8	10.0	4520-3010	11	---	X10	S5	500	Triode Sect.
{11LT8	12.6	4590-3216	13	---	X10	S5	375	{PENT. SECT. SET "LINE ADJUST" TO 86 ON 200 SCALE
{11LT8	12.6	4500-6870	0	77	SH	S1	750	XDual Diode
{11LY6	12.6	4520-7813	0	---	X10	S5	500	
{11MS8	12.6	4590-6780	52	---	X4	S5	825	Pent. Sect.
{11MS8	12.6	4520-1030	24	---	X4	S5	650	Triode Sect.
{11Y9†	10.0	5680-A970	16	---	X10	S5	650	PENT. NO. 1. USE ADAPTER SA-11, 1050-177.
{11Y9	10.0	5610-4320	12	---	X10	S5	450	Pent. No. 2
{12AC10†	12.6	1C90-A040	11	---	X10	S5	450	Triode No. 1
{12AC10	12.6	1C7B-5263	11	---	X10	S5	450	XDual Triode
{12AE10†	12.6	1C80-BA90	25	---	X4	S5	425	Pent. No. 1
{12AE10	12.6	1C30-7625	23	---	X2	S5	250	Pent. No. 2
{12AF3	12.6	4500-2000	0	44	SH	S3	650	{CONNECT CAP TO EXT. SELF BIAS RES. JACKS MODEL 752A-CAP-K
{Model 752A:	12.6	4300-7215	0	78	SH	S1	400	XDual Diode
{12AL5	12.6	1C80-BA90	19	---	X10	S5	400	Pent. No. 1
{12AL11†	12.6	1C30-6724	22	---	X2	S5	300	Pent. No. 2
{12AL11	12.6	4310-5620	18	---	X4	S5	575	
{12AO5	12.6	4310-7020	15	---	X4	S5	175	Triode Sect.
{12AT6	12.6	4300-6527	0	30	SH	S1	400	XDual Diode
{12AT6	12.6	4572-6183	14	---	X4	S5	625	XDual Triode
{12AU6	12.6	4310-5672	10	---	X4	S5	475	XDual Triode
{12AU7	12.6	4572-6183	25	---	X2	S5	675	
{12AV5	12.6	7210-5830	28	---	X10	S4	350	
{12AV6	12.6	4310-7025	14	---	X4	S5	200	Triode Sect.
{12AV6	12.6	4300-6527	0	30	X10	S5	400	XDual Diode
{12AV7	12.6	4572-6183	10	---	SH	S5	525	XDual Triode
{12AX3†	12.6	1C00-4070	0	40	SH	S3	650	
{12AX7	12.6	4572-6183	14	---	X4	S5	200	XDual Triode
{12AY3†	12.6	4500-2090	0	52	SH	S3	650	USE ADAPTER SA-4, 1050-144
{Model 752A:	No Adapter Required.							
{12AY7	12.6	4572-6183	15	---	X4	S5	275	XDual Triode
{12AZ7	12.6	4572-6183	14	---	X4	S5	625	XDual Triode
{12B4	12.6	4520-9010	50	---	X10	S5	400	
{12BA6	12.6	4310-5672	0	---	X4	S5	500	
{12BA7	12.6	4570-9132	0	---	X2	---	225	AMPL. SECT. HOLD DOWN S1 AND PRESS S8. Osc. Sect.
{12BA7	12.6	4520-1037	16	---	X10	S5	500	
{12BD6	12.6	4310-5672	10	---	X4	S5	300	
{12BE3†	12.6	1C00-A070	0	58	SH	S3	650	
{12BE6	12.6	4370-5621	0	---	X2	---	250	AMPL. SECT. HOLD DOWN S1 AND PRESS S8. Osc. Sect.
{12BE6	12.6	4310-6027	20	---	X10	S5	400	Triode Sect.
{12BF6	12.6	4310-7020	21	---	X2	S5	600	XDual Diode
{12BF6	12.6	4300-6527	0	30	SH	S1	400	



TUBE TYPE	FIL	SELECTORS	BIAS	SHUNT	MULT	PRESS	MINIMUM MUT COND	NOTATIONS	TUBE TYPE	FIL	SELECTORS	BIAS	SHUNT	MULT	PRESS	MINIMUM MUT COND	NOTATIONS
{12BF11†	12.6	1C80-8A90	30	---	X10	S5	375	Pent. No. 1	{12FQ8	12.6	4572-8390	10	---	X2	S5	250	X DUAL TEST TRIODE No. 1, PLATE No. 2
{12BF11	12.6	1C30-7625	17	---	X2	S5	200	Pent. No. 2	{12FQ8	12.6	4572-6190	10	---	X2	S5	250	X DUAL TEST TRIODE No. 1, PLATE No. 2
{12BH7	12.6	4572-6183	28	---	X4	S5	475	X Dual Triode	12FX5	12.6	4320-7610	15	---	X10	S5	475	
{12BN6	12.6	4320-7516	0	---	X1	S5	500	Limiter Grid	{12G11†	12.6	1C80-8A90	39	---	X4	S5	650	
{12BN6	12.6	4360-7512	0	---	X1	S5	525	QUADRATURE GRID	{12G11	12.6	1C30-6724	20	---	X2	S5	150	
12BQ6	12.6	7250-0480	28	---	X10	S4	350	Cap=P	12GC6	12.6	2750-0830	50	---	X10	S5	300	
{12BS3†	12.6	4500-2090	0	60	SH	S3	400	USE ADAPTER SA-4, 1050-144	12GE5†	12.6	1C80-72A0	50	---	X10	S5	300	
{Model 752A:	No Adapter Required.								12GJ5†	12.6	4560-0730	31	---	X10	---	450	
12BT3†	12.6	1C00-4070	0	60	SH	S3	650		{Model 752A:	No Adapter Required.							
{12BV11†	12.6	1C70-A98B	13	---	X4	S5	400	Pent. No. 1	12GN7	12.6	4520-7819	10	---	X20	S5	600	
{12BV11	12.6	1C60-3452	13	---	X4	S5	400	Pent. No. 2	{12GT5	12.6	4560-9730	31	---	X10	---	450	
12BY3	12.6	4500-2000	0	60	SH	S3	650	CONNECT CAP TO EXT. SELF BIAS RES. JACKS MODEL 752A-CAP-K	{Model 752A:	No Adapter Required.							
{Model 752A:	No Adapter Required.								12GV5†	12.6	1C90-0BA0	48	---	X10	S5	350	
12BY7	12.6	4520-7813	0	---	X10	S5	500		12GW6	12.6	2750-0480	31	---	X10	---	450	
12BZ6	12.6	4310-5627	10	---	X4	S5	700		12H-B25	12.6	4520-0798	45	---	X10	S5	350	
12C5	12.6	4320-7610	13	---	X10	---	475	HOLD DOWN S1 AND PRESS S5	{12HE7†	12.6	1C90-5880	58	---	X10	S5	200	
12CA5	12.6	3420-7610	0	---	X10	S5	425		{12HE7	12.6	1C00-2040	0	85	SH	S1	200	
{12CK3†	12.6	4500-2090	0	83	SH	S1	650	USE ADAPTER SA-4, 1050-144	12HG7	12.6	4520-7813	11	---	X20	S5	550	
{Model 752A:	No Adapter Required.								12HL5	12.6	4520-7930	21	---	X10	S5	625	
12CL3†	12.6	4500-2090	0	83	SH	S1	650	USE ADAPTER SA-4, 1050-144	12HL7	12.6	4520-7813	18	---	X10	S5	450	
{Model 752A:	No Adapter Required.								{12JB6†	12.6	4520-0138	31	---	X10	---	450	
12CR6	12.6	4370-5612	11	---	X4	S5	350	Pent. Sect.	{Model 752A:	No Adapter Required.							
{12CR6	12.6	4300-2010	0	30	SH	S1	400	Diode Sect.	12JF5†	12.6	1C30-0240	36	---	X10	---	300	
{12CS6	12.6	4310-5627	16	---	X1	S5	300	Grid No. 1	12JN6†	12.6	1C80-7324	48	---	X10	S5	350	
{12CS6	12.6	4370-5621	0	---	X1	S5	775	Grid No. 3	{12JN8	12.6	4590-6780	12	---	X10	S5	375	
12CT3	12.6	4500-2090	0	45	SH	S3	750		{12JN8	12.6	4510-2030	20	---	X10	S5	450	
12CU5	12.6	4320-7610	22	---	X10	---	375	HOLD DOWN S1 AND PRESS S5	{12JQ6	12.6	4570-1396	55	---	X4	S5	600	
12CU6	12.6	7250-0480	28	---	X10	S4	350	Cap=P	{12JQ6	12.6	4500-6090	0	70	SH	S1	400	
12D4	12.6	7800-5030	0	40	SH	S3	650		12JS6†	12.6	1C50-0324	68	---	X4	S5	600	
12DB5	12.6	4530-9120	25	---	X10	---	375	HOLD DOWN S1 AND PRESS S5	{12JT6†	12.6	4520-9736	47	---	X10	S5	275	
12DJ8	12.6	4572-6183	20	---	X10	S5	775	X Dual Triode	{Model 752A:	No Adapter Required.							
12DM4	12.6	7800-5030	0	49	SH	S3	650		12K5	12.6	4320-7510	10	---	X4	S4	825	
12DM5	12.6	4320-7610	13	---	X10	---	475	HOLD DOWN S1 AND PRESS S5	{12MD8†	12.6	4568-3270	27	---	X4	S5	575	
12DQ6	12.6	7250-0480	36	---	X10	---	300	Cap=P HOLD DOWN S1 AND PRESS S5	{12MD8	12.6	4590-1070	27	---	X4	S5	575	
12DT5	12.6	4530-9170	22	---	X10	S5	300		{Model 752A:	No Adapter Required.							
{12DT6	12.6	4310-5627	12	---	X1	S5	375	Grid No. 1	{12MN8†	12.6	1C80-6030	21	---	X4	S5	650	
12DT6	12.6	4370-5621	8	---	X1	S5	300	Grid No. 3	{12MN8	12.6	1CAB-4230	21	---	X4	S5	650	
12DT7	12.6	4572-6183	14	---	X4	S5	200	X Dual Triode	12R-LL5	12.6	4572-6138	23	---	X4	S5	400	
12DT8	12.6	4572-6183	14	---	X4	S5	625	X Dual Triode	12SN7	12.6	7841-5263	23	---	X4	S5	400	
{12DW4†	12.6	4500-2090	0	55	SH	S3	650	USE SA-4, 1050-144	{12T10†	12.6	1C80-8A90	20	---	X10	S6	375	
{Model 752A:	No Adapter Required.								{12T10	12.6	1C30-7625	15	---	X2	S5	200	
12DW7	12.6	4570-6080	14	---	X4	S5	200	Triode No. 1	12V6	12.6	7250-3480	18	---	X4	S5	575	
{12DW7	12.6	4520-1030	25	---	X2	S5	675	Triode No. 2	12W6	12.6	7250-3480	25	---	X10	---	375	
12FK6	12.6	4310-7020	20	0	SH	S1	400	TRIODE SECT. MAKE NO GAS TEST	12X4	12.6	4300-6170	0	18	SH	S3	650	
{12FK6	12.6	4300-6520	0	30	SH	S1	400	X Dual Diode	{13CW4†	12.6	3140-2080	10	---	X10	S4	575	
{12FM6	12.6	4300-7021	0	25	SH	S1	650	TRIODE SECT. MAKE NO GAS TEST.	{Model 752A:	No Adapter Required.							
12FM6	12.6	4300-6520	0	36	SH	S1	400	X Dual Diode	13CW4	12.6	AC40-2080	10	---	X10	S4	575	
									{13DE7	12.6	4570-6080	30	---	X2	S5	625	
									{13DE7	12.6	4520-1090	55	---	X4	S5	775	

TUBE TYPE	FIL	SELECTORS	BAS	SHUNT	MULT	PRESS	MINIMUM MUT COND	NOTATIONS
{13DR7	12.6	4570-6080	13	---	X2	S5	375	Triode No. 1
{13DR7	12.6	4520-1090	55	---	X4	S5	850	Triode No. 2
{13EM7	12.6	8740-5060	13	---	X2	S5	550	Triode No. 1
{13EM7	12.6	8710-2030	60	---	X10	S5	425	Triode No. 2
{13FD7	12.6	4570-6080	15	---	X2	S5	500	Triode No. 1
{13FD7	12.6	4520-1090	60	---	X10	S5	475	Triode No. 2
{13FM7†	12.6	1CA0-B090	20	---	X2	S5	300	Triode No. 1
{13FM7	12.6	1C80-5070	61	---	X4	S5	725	Triode No. 2
{13GF7†	12.6	4590-8010	20	---	X2	S5	250	Triode No. 1
{13GF7	12.6	4520-6030	64	---	X10	S5	450	Triode No. 2
Model 752A: No Adapter Required.								
{13J10†	12.6	1C70-4685	0	---	X1	S5	500	Pent. No. 1
{13J10	12.6	1C80-9230	20	---	X10	S5	375	Pent. No. 2
{13JZ8†	12.6	1C70-4890	34	---	X10	S5	300	Pent. Sect.
{13JZ8	12.6	1CA0-2080	32	---	X2	S5	450	Triode Sect.
{13V10†	12.6	1C80-BA90	26	---	X10	S5	300	Pent. No. 1
{13V10	12.6	1C30-7625	26	---	X4	S5	150	Pent. No. 2
{13Z10†	12.6	1C70-4685	0	---	X1	S5	500	Pent. No. 1
{13Z10	12.6	1C80-9230	20	---	X10	S5	375	Pent. No. 2
{14BL11†	12.6	1C80-2A80	13	---	X10	S5	625	Pent. Sect.
{14BL11	12.6	1C50-7060	11	---	X10	S5	375	Triode No. 1
{14BL11	12.6	1C30-9040	18	---	X10	S5	450	Triode No. 2
{14BR11†	12.6	1C20-B340	10	---	X10	S5	500	Pent. Sect.
{14BR11	12.6	1C80-6050	13	---	X10	S5	400	Triode No. 1
{14BR11	12.6	1CA0-9070	14	---	X10	S5	325	Triode No. 2
{14GT8	12.6	4580-9070	10	---	X2	S5	250	Triode Sect.
{14GT8	12.6	4500-2631	0	78	SH	S1	400	Dual Diode
{14JG8	12.6	4580-9070	10	---	X2	S5	475	Triode Sect.
{14JG8	12.6	4500-6213	0	78	SH	S1	400	Dual Diode
{15AF11†	17.0	1C80-2A90	12	---	X10	S5	450	Pent. Sect.
{15AF11	17.0	1C60-8050	13	---	X4	S5	825	Triode No. 1
{15AF11	17.0	1C30-4070	13	---	X4	S5	625	Triode No. 2
{15BD11†	12.6	1C80-2A90	19	---	X10	S5	450	Pent. Sect.
{15BD11	12.6	1C60-8050	15	---	X4	S5	800	Triode No. 1
{15BD11	12.6	1C30-4070	18	---	X4	S5	700	Triode No. 2
{15CW5	17.0	4520-7930	30	---	X10	S5	475	HOLD DOWN "LIFE TEST"
{15EW7	17.0	4570-6080	31	---	X2	S5	525	Triode No. 1, SET "LINE ADJUST" AT 110 ON 200 SCALE
{15EW7	17.0	4520-1090	59	---	X10	S5	450	Triode No. 2
{15FM7†	12.6	1CA0-B090	20	---	X2	S5	300	Triode No. 1
{15FM7	12.6	1C80-5070	61	---	X4	S5	725	Triode No. 2
{15FY7†	17.0	1CA0-B090	20	---	X2	S5	225	Triode No. 1, SET "LINE ADJUST" AT 110 ON 200 SCALE
{15FY7	17.0	1C30-5070	55	---	X10	S5	475	Triode No. 2
{15HA6	17.0	4520-7613	11	---	X20	S5	350	SET "LINE ADJUST" TO 700 ON 1500 SCALE
{15HB6	17.0	4520-7819	12	---	X20	S5	500	Pent. Sect.
{15KY8†	17.0	4520-6730	39	---	X10	S5	300	SET "LINE ADJUST" TO 700 ON 1500 SCALE
{15KY8	17.0	4590-8010	16	---	X2	S5	350	Triode Sect.
Model 752A: No Adapter Required.								
{15LE8	12.6	4590-6837	10	---	X2	S5	400	Pent. No. 1, SET "LINE ADJUST" TO 110 ON 200 SCALE
{15LE8	12.6	4590-1832	10	---	X2	S5	400	Pent. No. 2

TUBE TYPE	FIL	SELECTORS	BAS	SHUNT	MULT	PRESS	MINIMUM MUT COND	NOTATIONS
{15MF8†	12.6	1C70-4890	34	---	X4	S5	750	Pent. Sect. SET "LINE ADJUST" AT 725 ON 1500 SCALE
{15MF8	12.6	1CA0-20B0	21	---	X4	S5	750	Triode Sect.
{15MX8†	17.0	4520-6730	39	---	X10	S5	300	(Pent. Sect. SET "LINE ADJUST" AT 700 ON 3000 SCALE. USE ADAPTER SA-4, 1050-144)
{15MX8	17.0	4590-8010	16	---	X2	S5	350	Triode Sect.
Model 752A: No Adapter Required.								
{16AK9†	17.0	1C80-5970	35	---	X4	S5	850	Pent. Sect.
{16AK9	17.0	1CA0-B070	17	---	X4	S5	575	Triode No. 1
{16AK9	17.0	1C30-2070	30	---	X2	S5	625	Triode No. 2
{16BQ11†	17.0	1CA0-89B7	10	---	X10	S5	350	Pent. No. 1
{16BQ11	17.0	1C50-2364	10	---	X10	S5	375	Pent. No. 2
{16BX11†	17.0	1C20-B3A0	5	---	X10	S5	440	Pent. Sect.
{16BX11	17.0	1C80-7090	16	---	X10	S5	390	Triode No. 1
{16BX11	17.0	1C50-6040	15	---	X10	S5	430	Triode No. 2
{16GK6	17.0	4520-7813	7	---	X10	S5	550	Cap=P
{16GY5†	17.0	1C90-0BA0	59	---	X4	S5	800	Cap=P
{16HB5†	17.0	1C80-72A0	59	---	X4	S5	625	Cap=P
{16JV6†	17.0	1C80-732A	60	---	X10	S5	325	Cap=P
{16KA6†	17.0	1C50-03A4	62	---	X10	S5	300	Pent. Sect.
{16LU8†	17.0	1C60-4890	40	---	X10	S5	350	Triode Sect.
{16LU8	17.0	1CA0-20B0	21	---	X4	S5	350	Pent. Sect.
{16MY8†	17.0	1C60-4890	40	---	X10	S5	350	Triode Sect.
{16MY8	17.0	1CA0-20B0	21	---	X4	S5	350	Triode Sect.
{16Y9†	17.0	5680-A970	16	---	X10	S5	650	Pent. No. 1 USE ADAPTER SA-11, 1053-17
{16Y9	17.0	5610-4320	12	---	X10	S5	450	Pent. No. 2 USE ADAPTER SA-11, 1050-171
{17AB9†	17.0	5690-78A0	16	---	X10	S5	375	Tetrode No. 1 USE ADAPTER SA-11, 1050-171
{17AB9	17.0	5630-1240	16	---	X10	S5	375	Tetrode No. 2
{17AB10†	17.0	1C70-4685	0	---	X1	S5	500	LIMITER GRID
{17AB10	17.0	1C50-4687	0	---	X1	S5	525	QUADRATURE GRID
{17AB10	17.0	1C80-9230	35	---	X4	S5	700	Pent. No. 2
{17AX3†	17.0	1C00-4070	0	40	SH	S3	650	
{17AX4	17.0	8700-5030	0	40	SH	S3	650	
{17AY3†	17.0	4500-2090	0	52	SH	S3	650	USE ADAPTER SA-4, 1050-144
Model 752A: No Adapter Required.								
{17BE3†	17.0	1C00-A070	0	58	SH	S3	650	
{17BF11†	17.0	1C80-BA90	30	---	X10	S5	375	Pent. No. 1
{17BF11	17.0	1C30-7625	17	---	X2	S5	200	Pent. No. 2
{17BH3†	17.0	4500-2090	0	52	SH	S3	650	USE ADAPTER SA-4, 1050-144
Model 752A: No Adapter Required.								
{17BO6	17.0	7250-0480	47	---	X4	S5	650	Cap=P
{17BS3†	17.0	4500-2090	0	60	SH	S3	400	USE ADAPTER SA-4, 1050-144
{17BW3†	17.0	1C00-A070	0	49	SH	S3	650	
{17BZ3†	17.0	1C00-A070	0	77	SH	S3	400	
{17C5	17.0	4320-7610	13	---	X10	---	475	HOLD DOWN S1 AND PRESS S5
{17C9†	17.0	4570-9860	16	---	X4	S5	700	Tetrode No. 1
{17C9	17.0	4510-32A0	16	---	X4	S5	700	Tetrode No. 2
{17CK3†	17.0	4500-2090	0	83	SH	S1	650	USE ADAPTER SA-4, 1050-144
Model 752A: No Adapter Required.								



TUBE TYPE	FIL	SELECTORS	BIAS	SHUNT	MULT	PRESS	MINIMUM MUT COND	NOTATIONS	TUBE TYPE	FIL	SELECTORS	BIAS	SHUNT	MULT	PRESS	MINIMUM MUT COND	NOTATIONS
{17CL3†	17.0	4500-2090	0	83	SH	S1	650	USE ADAPTER SA-4, 1050-144	{18FY6	20.0	4310-7020	12	---	X1	S5	425	Triode Sect.
{Model 752A: No Adapter Required.									{18FY6	20.0	4300-6520	0	32	SH	S1	400	✗Dual Diode
17CT3	17.0	4500-2090	0	45	SH	S3	750		18GB5	20.0	4520-0780	73	---	X4	S5	400	CAP-P, USE ADAPTER SA-8, 1050-168
17CU5	17.0	4320-7610	42	---	X4	S5	700		18GD6A	17.0	4310-5672	16	---	X2	S5	600	
17D4	17.0	7800-5030	0	40	SH	S3	650		19AQ5	20.0	4310-5620	18	---	X4	S5	575	
17DE4	17.0	7800-5030	0	49	SH	S3	650		19AU4	20.0	7800-5030	0	58	SH	S3	650	
17DM4	17.0	7800-5030	0	49	SH	S3	650		19CG3†	20.0	1C00-4070	0	78	SH	S3	400	
17DQ6	17.0	7250-0480	36	---	X10	---	300	CAP = P HOLD DOWN S1 AND PRESS S5 USE SA-4, 1050-144	{19CL8A	20.0	4520-6370	13	---	X4	S5	550	Tetrode Sect.
{17DW4†	17.0	4500-2090	0	55	SH	S3	650		{19CL8A	20.0	4590-1080	12	---	X10	S5	450	Triode Sect.
{Model 752A: No Adapter Required.									19DE3†	20.0	1C00-4000	0	78	SH	S3	400	Cap = K
17GE5†	17.0	1CB0-72A0	26	---	X10	---	550	HOLD DOWN S1 AND PRESS S5	19DK3†	20.0	4500-2000	0	78	SH	S3	400	CONNECT CAP TO EXT SELF BIAS JACKS MODEL 732, CAP-K
{17GJ5†	17.0	4560-0730	31	---	X10	---	450	CAP-P, HOLD DOWN S1 AND PRESS S5 USE ADAPTER SA-4, 1050-144	19DQ3†	20.0	1C00-4070	0	83	SH	S1	650	
{Model 752A: No Adapter Required.									{19EA8	20.0	4520-6370	13	---	X4	S5	550	Pent. Sect.
{17GT5†	17.0	4560-9730	31	---	X10	---	450	HOLD DOWN S1 AND PRESS S5 USE ADAPTER SA-4, 1050-144	{19EA8	20.0	4590-1080	11	---	X10	S5	525	Triode Sect.
{Model 752A: No Adapter Required.									{19EZ8	20.0	4597-8600	19	---	X2	S5	575	✗Dual Triode
17GV5†	17.0	1C90-0BA0	27	---	X10	---	525	CAP-P, HOLD DOWN S1 AND PRESS S5	{19EZ8	20.0	4520-3010	21	---	X2	S5	600	Triode No. 3
17GW6	17.0	2750-0480	31	---	X10	---	450	CAP-P, HOLD DOWN S1 AND PRESS S5	19FX5	20.0	4320-7610	15	---	X10	S5	475	
17H3	17.0	4500-3010	0	40	SH	S3	650		{19GQ7	20.0	4500-8697	0	80	SH	S1	400	✗DIODES NO. 1 AND NO.
17H-B25	17.0	4520-0798	45	---	X10	S5	350	CAP-P	{19GQ7	20.0	4500-2010	0	80	SH	S1	400	Diode No. 3
{17JB6†	17.0	4520-0138	31	---	X10	---	450	USE ADAPTER SA-8, 1050-168 (CAP-P, HOLD DOWN S1 AND PRESS S5 USE ADAPTER SA-4, 1050-144)	19HR6	20.0	4310-5672	10	---	X10	S5	375	
{Model 752A: No Adapter Required.									19HS6	20.0	4310-5672	15	---	X4	S5	650	
17JF6†	17.0	4520-0738	36	---	X10	---	550	CAP-P, HOLD DOWN S1 AND PRESS S5 USE ADAPTER SA-4, 1050-144	{19HV8	20.0	4590-6780	10	---	X2	S5	300	Pent. Sect.
{Model 752A: No Adapter Required.									{19HV8	20.0	4510-2030	14	---	X10	S5	400	Triode Sect.
{17JG6A†	17.0	4520-9736	36	---	X10	---	550	ADAPTER SA-4, 1050-144	{19JN8	20.0	4590-6780	12	---	X10	S5	375	Pent. Sect.
{Model 752A: No Adapter Required.									{19JN8	20.0	4510-2030	20	---	X10	S5	450	Triode Sect.
17JM6†	17.0	1C50-032A	48	---	X10	S5	350	HOLD DOWN S1 AND PRESS S5 USE ADAPTER SA-4, 1050-144	{19KG8	20.0	4590-6780	10	---	X4	S5	650	Pent. Sect.
17JN6†	17.0	1CB0-7324	48	---	X10	S5	350		{19KG8	20.0	4520-1030	16	---	X10	S5	475	Triode Sect.
{17JQ6	17.0	4570-1396	55	---	X5	S5	600	Cap = P	19M-R9	17.0	4310-5672	16	---	X2	S5	600	
{17JQ6	17.0	4500-6090	0	70	SH	S1	400	Pent. Sect.	{19Q9†	20.0	4510-32A6	10	---	X4	S5	650	Pent. Sect.
{17JR6†	17.0	4520-9136	79	---	X2	S5	575	Diode Sect.	{19Q9†	20.0	4580-9076	15	---	X10	S5	450	Triode Sect.
{Model 752A: No Adapter Required.								USE ADAPTER SA-4, 1050-144	{19X8	20.0	4570-9861	10	---	X4	S5	725	Pent. Sect.
17JT6†	17.0	4520-9736	47	---	X10	S5	275	USE ADAPTER SA-4, 1050-144	{19X8	20.0	4520-3061	15	---	X10	S5	350	Triode Sect.
{Model 752A: No Adapter Required.									{20EW7	20.0	4570-6080	34	---	X2	S5	650	Triode No. 1
17JZ8†	17.0	1C70-4890	35	---	X4	S5	725	Pent. Sect.	{20EW7	20.0	4520-1090	56	---	X10	S5	475	Triode No. 2
17JZ8	17.0	1CA0-20B0	32	---	X2	S5	400	Triode Sect.	20EZ7	20.0	2185-7694	14	---	X4	S5	200	✗Dual Triode
{17KV6†	17.0	4520-9736	65	---	X4	S5	760	USE ADAPTER SA-4, 1050-141	Tubes indicating shorts: Re-test using 7250-0130								
{Model 752A: No Adapter Required.									20LF6†	20.0	1C50-0324	77	---	X4	S5	750	Cap = P
17LD8†	17.0	4520-6730	41	---	X4	S5	700	PENT. SECT. USE ADAPTER SA-4, 1050-141	21GY5†	20.0	1C50-07A0	32	---	X10	---	675	CAP-P, HOLD DOWN S1 AND PRESS S5.
17LD8	17.0	4590-8010	32	---	X2	S5	450	Triode Sect.	21HB5†	20.0	1CB0-72A0	59	---	X4	S5	625	
{Model 752A: No Adapter Required.									21HD5†	20.0	1CB0-79A0	52	---	X10	S5	400	
17X10†	17.0	1C70-4685	0	---	X1	S5	500	Limiter Grid	21HJ5†	20.0	1CB0-792A	53	---	X10	S5	350	
17X10	17.0	1C50-4687	0	---	X1	S5	525	QUADRATURE GRID	21JV6A†	20.0	1C50-0324	68	---	X4	S5	600	Cap = P
{17X10	17.0	1CB0-9230	35	---	X4	S5	700	Pent. No. 2	21JV6†	20.0	1CB0-732A	60	---	X10	S5	325	
18A5	20.0	7210-5830	40	---	X4	S5	750		21JZ6†	20.0	1C50-0324	63	---	X10	S5	300	Cap = P
{18AJ10†	17.0	1C80-BA90	35	---	X2	S5	715	Pent. No. 1	21KA6†	20.0	1C50-03A4	62	---	X10	S5	300	Cap = P
{18AJ10	17.0	1C30-7625	12	---	X1	S5	640	Pent. No. 2	21KQ6	20.6	4520-0392	30	---	X10	S5	750	CAP-P, USE ADAPTER SA-8, 1050-168
18FW6	20.0	4310-5672	14	---	X4	S5	375		21LG6†	20.0	1C50-0B40	73	---	X10	S5	420	Cap = P
{18FX6	20.0	4310-5627	12	---	X2	S5	300	Ampl. Sect.									
18FX6	20.0	4310-6027	18	---	X10	S5	400	Osc. Sect.									

TUBE TYPE	FIL	SELECTORS	BAS	SHUNT	MULT	PRESS	MINIMUM MUT COND	NOTATIONS
{21LR8†	20.0	4520-6730	40	---	X10	S5	350	Pent. Sect. USE ADAPTER SA-4, 1050-144
{21LR8	20.0	4590-8010	21	---	X4	S5	350	Triode Sect.
{Model 752A:	No Adapter	Required.						
{21LU8†	20.0	1060-4890	40	---	X10	S5	350	Pent. Sect.
{21LU8	20.0	10A0-20B0	21	---	X10	S5	350	Triode Sect.
{21MY8†	20.0	1060-4890	40	---	X10	S5	350	Pent. Sect.
{21MY8	20.0	10A0-20B0	21	---	X4	S5	350	Triode Sect.
{22BH3†	20.0	4500-2090	0	52	SH	S3	650	{SET "LINE ADJUST" TO 850 ON 1500 SCALE (USE ADAPTER SA-4, 1050-144)
{Model 752A:	No Adapter	Required.						
22BW3†	25.0	1000-A070	0	49	SH	S3	650	
22DE4	25.0	7800-5030	0	49	SH	S3	650	
{22JF6†	20.0	4520-0738	36	---	X10	---	350	{CAP-P, HOLD DOWN S1 AND PRESS S5 (USE ADAPTER SA-4, 1050-144)
{Model 752A:	No Adapter	Required.						
{22JG6†	20.0	4520-9736	36	---	X10	---	550	{HOLD DOWN S1 AND PRESS S5 USE ADAPTER SA-4, 1050-144
{Model 752A:	No Adapter	Required.						
{22JR6†	20.0	4520-9136	79	---	X2	S5	575	USE ADAPTER SA-4, 1050-144
{Model 752A:	No Adapter	Required.						
{22JU6†	20.0	4520-0738	79	---	X2	S5	575	CAP-P.
{Model 752A:	No Adapter	Required.						USE ADAPTER SA-4, 1050-144
{22KM6†	20.0	4520-0738	72	---	X4	S5	350	CAP-P.
{Model 752A:	No Adapter	Required.						USE ADAPTER SA-4, 1050-144
{22KV6†	20.0	4520-9736	65	---	X4	S5	760	USE ADAPTER SA-4, 1050-144
{Model 752A:	No Adapter	Required.						
23JS6†	25.0	1050-0324	68	---	X4	S5	600	Cap=P
{23Z9†	25.0	1080-5970	40	---	X10	S5	300	Pent. Sect.
{23Z9	25.0	10A0-B070	20	---	X4	S5	550	Triode No. 1
{23Z9	25.0	1030-2070	30	---	X4	S5	350	Triode No. 2
{24BF11†	25.0	1080-BA90	30	---	X10	S5	450	Pent. No. 1
{24BF11	25.0	1030-7625	19	---	X2	S5	275	Pent. No. 2
{24GA7†	25.0	1040-7350	49	---	X4	S5	700	Pent. Sect.
{24GA7	25.0	1000-B080	0	43	SH	S3	400	Diode Sect.
{24JE6A†	25.0	4520-0738	42	---	X10	---	575	{CAP-P, HOLD DOWN S1 AND PRESS S5 (USE ADAPTER SA-4, 1050-144)
{Model 752A:	No Adapter	Required.						
{24JZ8†	25.0	1070-4890	40	---	X10	S5	425	Pent. Sect.
{24JZ8	25.0	10A0-20B0	34	---	X2	S5	500	Triode Sect.
{24LQ6†	25.0	4520-0738	42	---	X10	---	575	{CAP-P, HOLD DOWN S1 AND PRESS S5 (USE ADAPTER SA-4, 1050-144)
{Model 752A:	No Adapter	Required.						
25AV5	25.0	7210-5830	28	---	X10	S4	350	
25AX4	25.0	7800-5030	0	40	SH	S3	650	
25BK5	25.0	4530-1860	0	---	X10	S5	475	
25BQ6	25.0	7250-0480	28	---	X10	S4	350	Cap=P
25C5	25.0	4320-7610	13	---	X10	---	475	HOLD DOWN S1 AND PRESS S5
25CA5	25.0	3420-7610	0	---	X10	S5	425	
25CD6	25.0	7250-0830	29	---	X10	S4	375	Cap=P
25CG3†	25.0	1000-4070	0	78	SH	S3	400	
{25CK3†	25.0	4500-2090	0	83	SH	S1	650	USE ADAPTER SA-4, 1050-144
{Model 752A:	No Adapter	Required.						
{25CM3†	25.0	4500-2790	0	64	SH	S3	650	SHORT ON 4. USE ADAPTER SA-4, 1050-144
{Model 752A:	No Adapter	Required.						



TUBE TYPE	FIL	SELECTORS	BIAS	SHUNT	MULT	PRESS	MINIMUM MUT COND	NOTATIONS	TUBE TYPE	FIL	SELECTORS	BIAS	SHUNT	MULT	PRESS	MINIMUM MUT COND	NOTATIONS
{33HE7†	35.0	1090-5B80	58	---	X10	S5	200	Pent. Sect.	60FX5	50.0	4320-7610	15	---	X10	S5	475	SET "LINE ADJUST" TO 825 ON 1500 SCALE
{33HE7	35.0	1000-2040	0	65	SH	S3	500	Diode Sect.	60HL5	50.0	4520-7930	28	---	X20	S5	400	
{33JR6†	35.0	4520-9136	79	---	X2	S5	575	USE ADAPTER SA-4, 1050-144	KT66	6.3	7250-3481	20	---	X10	S5	400	
{Model 752A: No Adapter Required.									{80	5.0	4100-3000	0	36	SH	S3	400	Plate No. 1
33JV6†	35.0	1080-732A	60	---	X10	S5	325		{80	5.0	4100-2000	0	27	SH	S3	400	Plate No. 2
34CD3†	35.0	1000-A070	0	63	SH	S3	650		{83	5.0	4100-3000	0	60	SH	S3	650	Plate No. 1
34CE3†	35.0	1000-4070	0	65	SH	S3	650		{83	5.0	4100-2000	0	57	SH	S3	650	Plate No. 2
34GD5	35.0	3420-7610	39	---	X4	S5	700		85A1	See 0E3—Top of Chart							
{34CM3†	35.0	4500-2790	0	64	SH	S3	650	SHORT ON 4, USE ADAPTER SA-4, 1050-144	85A2	See 0G3—Top of Chart							
{Model 752A: No Adapter Required.									ECC88	6.3	4572-6183	20	---	X10	S5	775	⚡Dual Triode
35B5	35.0	4310-5620	0	---	X10	S4	300		KT88	6.3	7250-3481	13	---	X20	S5	225	
35C5	35.0	4320-7610	0	---	X10	S4	300		90C1	OFF	0000-5070	---	---	VR	†S9	90V	⚡110V. REGULATION=14 VOLTS FROM 1 TO 40 MA.
35EH5	35.0	4320-7610	15	---	X10	S5	450		150B2	OFF	0000-1020	---	---	VR	†S9	150V	⚡160 V. REGULATION=5 VOLTS FROM 5 TO 15 MA.
35GL6	35.0	4320-7510	35	---	X10	S5	325		{274A	5.0	1400-2000	0	50	SH	S3	400	Plate No. 1
{35HB8	35.0	4590-7680	24	---	X4	S5	475	Pent. Sect.	{274A	5.0	1400-3000	0	40	SH	S3	400	Plate No. 2
{35HB8	35.0	4510-3020	15	---	X4	S5	475	Triode Sect.	286A	2.0	1600-2354	30	---	X2	S5	200	Cap=G
35L6	35.0	7250-3480	0	---	X10	S4	300	Cap=P	CAA322	6.3	7200-5000	0	58	SH	S3	400	USE HICKOK ADAPTER CODE NO. 1050-90
35LR6†	35.0	1050-0324	80	---	X4	S5	2500		328A	7.5	1600-2354	18	---	X2	S5	575	Cap=G
35W4	35.0	4300-5070	0	50	SH	S3	650		349A	6.3	2750-3480	10	---	X4	S5	575	
35Z5	35.0	7200-5080	0	50	SH	S3	650		446A	OFF	0000-6710	---	---	VR	†S9	81V	⚡95V. REGULATION=1.0 V FROM 5 TO 40 MA.
36AM3	35.0	4300-5070	0	49	SH	S3	650	Cap=P	{829B	6.3	5762-0340	15	---	X10	S5	475	RIGHT CAP=P USE HICKOK ADAPTER {S-8 CODE NO. 1050-107
36KD6†	35.0	1050-0324	75	---	X4	S5	900	Cap=P	{829B	6.3	5126-0340	15	---	X10	S5	475	Left Cap=P
{36MC6†	35.0	4520-0738	75	---	X4	S5	900	Cap=P USE ADAPTER SA-4, 1050-144	{832A	6.3	5762-0340	28	---	X4	S5	550	RIGHT CAP=P USE HICKOK ADAPTER {S-8 CODE NO. 1050-107
{Model 752A: No Adapter Required.									{832A	6.3	5126-0340	28	---	X4	S5	550	Left Cap=P
{38HE7†	50.0	1090-5B80	51	---	X10	S5	200	PENT. SECT. SET "LINE ADJUST" TO 600 OHMS SCALE	836	4.3	4100-0000	0	55	SH	S3	650	Cap=P
{38HE7	50.0	1000-2040	0	82	SH	S1	500	Diode Sect.	866A	4.3	4100-0000	0	50	SH	S3	650	

TUBE TYPE	FIL	SELECTORS	BIAS	SHUNT	MULT	PRESS	MINIMUM MUT COND	NOTATIONS	TUBE TYPE	FIL	SELECTORS	BIAS	SHUNT	MULT	PRESS	MINIMUM MUT COND	NOTATIONS
5643	6.3	3670-1052	#	50	SH	S3	650	STRIKES AT ABOUT 70 *120 V. REGULATION-5 VOLTS (FROM 5 TO 25 MA.)	{5894	12.6	1762-0340	35	---	X4	S5	625	(RIGHT CAP=P USE HICKOK ADAPTER SA-8 CODE NO. 1050-107
5644	OFF	0000-1020	---	---	VR	†S9	95V	{*100 V. REGULATION-3 VOLTS (FROM 1.5 TO 3.5 MA.)	{5894	12.6	1726-0340	35	---	X4	S5	625	Left Cap=P
5651	OFF	0000-1070	---	---	VR	†S9	87V	{*100 V. REGULATION-3 VOLTS (FROM 1.5 TO 3.5 MA.)	5896	6.3	3600-5172	0	40	SH	S3	650	XDual Diode
5654	6.3	4310-5620	10	---	X4	S5	675		5897	6.3	3610-8050	19	---	X10	S5	300	
{5656	6.3	4523-8197	11	---	X10	S5	375	Tetrode No. 1	5899	6.3	3610-5740	13	---	X4	S5	475	
{5656	6.3	4532-7198	11	---	X10	S5	375	Tetrode No. 2	5900	6.3	3610-5740	13	---	X4	S5	475	
5670	6.3	9173-6482	16	---	X10	S5	300	XDual Triode	5902	6.3	3610-5720	40	---	X4	S5	650	
5672	1.1	3540-1200	27	---	X1	S5	300		5903	25.0	3600-5172	0	40	SH	S3	650	XDual Diode
5675	6.3	2730-5060	18	---	X10	S5	400	USE HICKOK ADAPTER SA-9 CODE NO. 1050-121	5904	25.0	3610-8050	20	---	X4	S4	475	
5676	1.1	4230-1000	26	---	X2	S5	500		5905	25.0	3610-5720	30	---	X2	S5	500	
5677	1.1	4230-1000	38	---	X2	S5	200		5906	25.0	3610-5720	13	---	X4	S5	475	
5678	1.1	3540-1200	8	---	X1	S5	525		5907	25.0	3610-5720	15	---	X4	S4	350	
5686	6.3	4520-7630	10	---	X4	S5	475		5908	25.0	3610-5724	8	---	X4	S4	275	
5687	12.6	4572-9163	28	---	X10	S5	475	XDual Triode	{5915A	6.3	4370-5621	0	---	X2	---	475	AMPL. SECT. HOLD DOWN STAND PRESS S5
5696	6.3	4310-6025	#	94	SH	S6	650	STRIKES AT ABOUT 27	{5915A	6.3	4310-5627	0	---	X2	S5	475	Osc. Sect.
5702	6.3	3470-1265	10	---	X4	S5	675		5916	25.0	3610-5724	20	---	X4	S5	250	Grid No. 1
5703	6.3	3450-1060	22	---	X10	S5	300		{5916	25.0	3640-5721	20	---	X2	---	225	GRID NO. 1 HOLD DOWN STAND PRESS S5
5704	6.3	2300-1040	0	80	SH	S1	400		5930	2.5	4130-2000	74	---	X4	S5	475	Plate No. 1
5718	6.3	3610-8057	10	---	X10	S4	350		{5931	5.0	8200-6000	0	35	SH	S3	650	Plate No. 2
5719	6.3	3610-8057	10	---	X4	S5	350		5932	6.3	7250-3481	17	---	X10	S5	300	
5725	6.3	4310-5627	0	---	X2	S5	550		5933	6.3	5130-0240	28	---	X4	S5	600	Cap=P
5726	6.3	4300-7215	0	78	SH	S1	400	XDual Diode	{5961	6.3	7250-3468	Use	This Setting For Short	X4	S5	625	Check Only.
5727	6.3	4310-6025	#	94	SH	S6	650	STRIKES AT ABOUT 27	5961	6.3	7250-4068	30	---	X4	S5	625	DO NOT CHECK FOR SHORTS.
5744	6.3	2340-1050	7	---	X10	S5	250		5963	12.6	4572-6183	17	---	X4	S5	425	XDual Triode
5749	6.3	4310-5672	0	---	X4	S5	500	AMPL. SECT. HOLD DOWN STAND PRESS S5	5964	6.3	4356-2170	21	---	X4	S5	625	XDual Triode
{5750	6.3	4370-5621	0	---	X2	---	250	Osc. Sect.	5965	12.6	4572-6183	15	---	X10	S5	400	XDual Triode
{5750	6.3	4310-6027	20	---	X10	S5	400		5971	1.1	5320-1000	20	---	X4	S5	225	
5751	12.6	4572-6183	14	---	X4	S5	200	XDual Triode	5975	6.3	4530-1020	29	---	X4	S5	625	
5755	12.6	4563-8172	0	---	X4	S5	225	XDual Triode	5977	6.3	3610-8053	30	---	X4	S5	625	
5763	6.3	4590-1673	0	---	X10	S5	425		5987	6.3	3610-2050	39	---	X2	S4	575	
5783	OFF	0000-3050	---	---	VR	†S9	87V	{*115 V. REGULATION-3 VOLTS (FROM 1.5 TO 1.5 MA.)	5993	6.3	3700-9150	0	30	SH	S3	650	XDual Diode
5784	6.3	3470-1265	16	---	X4	S5	275	{*130 V. REGULATION-8 VOLTS (FROM 5 TO 30 MA.)	5995	6.3	4300-1050	0	30	SH	S3	650	Leads 1-3-4-5
5787	OFF	0000-3050	---	---	VR	†S9	100V	{*130 V. REGULATION-8 VOLTS (FROM 5 TO 30 MA.)	5998	7.5	7841-5263	37	---	X20	S4	425	XDual Triode
5812	*6.3	4310-5602	28	---	X4	S5	650	XDual Triode	6005	6.3	4310-5620	18	---	X4	S5	575	
5814	12.6	4572-6183	25	---	X2	S5	675		6012	6.3	7230-5018	#	93	SH	S6	650	STRIKES AT ABOUT 39
5824	25.0	7250-3480	20	---	X10	S4	300		6021	6.3	3672-8154	15	---	X10	S5	325	XDual Triode
5825	1.4	4100-0000	0	0	SH	S6	250	Cap=P	6028	20.0	4310-5620	10	---	X4	S5	675	HOLD DOWN S1 AND PRESS S5.
5829	6.3	3500-6172	0	78	SH	S1	400	XDual Diode	6046	25.0	7250-3481	25	---	X10	---	375	
5840	6.3	3610-5740	16	---	X4	S5	475		6050	1.1	4230-1000	32	---	X4	S5	200	
5842	6.3	3950-1060	19	---	X20	S5	375	XDual Triode	6051	1.1	3540-1200	39	---	X1	S4	350	XDual Diode
5844	6.3	4356-2170	24	---	X4	S5	525		6052	6.3	3600-5172	0	40	SH	S3	650	XDual Diode
5847	6.3	3910-6840	13	---	X20	S5	300		6053	25.0	3600-5172	0	40	SH	S3	650	
5852	6.3	7200-5380	0	35	SH	S3	400	XDual Diode	6055	25.0	3610-8050	20	---	X4	S4	475	
5876	6.3	2730-5060	11	---	X10	S5	325		6056	25.0	3610-5720	15	---	X4	S4	350	
5881	6.3	7250-3481	17	---	X10	S5	300	USE HICKOK ADAPTER SA-9 CODE NO. 1050-121	6058	6.3	4300-7215	0	78	SH	S1	400	XDual Diode
5893	6.3	7230-5060	16	---	X10	S5	375	USE HICKOK ADAPTER SA-9 CODE NO. 1050-121	6064	6.3	3410-5726	11	---	X10	S5	300	
									6072	12.6	4572-6183	15	---	X4	S5	275	XDual Triode



TUBE TYPE	FIL	SELECTORS	BIAS	SHUNT	MULT	PRESS	MINIMUM MUT COND	NOTATIONS	TUBE TYPE	FIL	SELECTORS	BIAS	SHUNT	MULT	PRESS	MINIMUM MUT COND	NOTATIONS
6073	OFF	0000-5020	---	---	VR	†S9	150V	{★155 V. REGULATION = 2 VOLTS {FROM 5 TO 30 MA. {★115 V. REGULATION = 1 VOLT {FROM 5 TO 30 MA. XDual Triode	6332	OFF	0000-1020	---	---	VR	†S9	63V	{★80 V. REGULATION = 5 VOLTS {FROM 0.2 TO 1.5 MA. {LEADS IN PIN POS. 1-2. XDual Triode
6074	OFF	0000-5020	---	---	VR	†S9	108V	{★115 V. REGULATION = 1 VOLT {FROM 5 TO 30 MA. XDual Triode	6350	12.6	4583-6172	27	---	X10	S5	275	{★180 V. REGULATION = 5 VOLTS {FROM 5 TO 15 MA. Tetrode No. 1
6080	7.5	7841-5263	55	---	X4	S4	625	XDual Triode	6354	OFF	0000-1020	---	---	VR	†S9	150V	Tetrode No. 2
6082	25.0	7841-5263	55	---	X4	S4	625	XDual Triode	{6360	12.6	4531-8720	13	---	X4	S5	500	XDual Triode
6084	6.3	4590-6138	15	---	X2	S5	575	XDual Triode	{6360	12.6	4513-6720	13	---	X4	S5	500	XDual Triode
6085	12.6	4572-6183	17	---	X4	S5	425	XDual Triode	6384	6.3	6870-3510	17	---	X10	S5	325	XDual Triode
6086	20.0	4520-6139	10	---	X10	S5	550	XDual Triode	6386	6.3	9173-6482	23	---	X4	S5	625	XDual Triode
6096	6.3	4310-5620	10	---	X4	S5	675	XDual Diode	6397	2.5	7180-3600	29	---	X2	S5	600	XDual Triode
6097	6.3	4300-7215	0	78	SH	S1	400	XDual Diode	6414	12.6	4572-6183	15	---	X10	S5	350	XDual Triode
6098	6.3	6870-3510	17	---	X10	S5	325	XDual Diode	6417	12.6	4590-1673	0	---	X10	S5	425	XDual Triode
6110	6.3	3600-5172	0	70	SH	S1	400	XDual Diode	6418	1.4	3500-2041	0	0	SH	S1	175	MAKE NO GAS TEST
6111	6.3	3672-8154	8	---	X10	S4	300	XDual Triode	6463	12.6	4583-6172	24	---	X10	S5	300	XDual Triode
6112	6.3	3672-8154	15	---	X4	S5	400	XDual Triode	6485	6.3	4310-5672	13	---	X10	S5	375	XDual Triode
6134	6.3	7240-8653	13	---	X10	S5	375	Cap=P	6519	1.4	3540-1200	20	---	X1	S5	350	MAKE NO GAS TEST
6135	6.3	4360-1070	25	---	X2	S5	675	Cap=P	6520	7.5	7841-5263	55	---	X4	S4	625	XDual Triode
6136	6.3	4310-5672	10	---	X4	S5	475	USE HICKOK ADAPTER SA-9 CODE NO. 1050-121	{6524	6.3	5362-0740	15	---	X4	S5	700	CAP OVER OCTAL PINS
6137	6.3	7240-8653	10	---	X4	S5	300	Cap=P	{6524	6.3	5326-0140	15	---	X4	S5	700	2-3=P CAP OVER OCTAL PINS
6146	6.3	7250-0318	12	---	X10	S4	425	Cap=P	6526	1.1	3540-1200	35	---	X2	S5	800	
6148	6.3	3470-1265	10	---	X4	S5	675	USE HICKOK ADAPTER SA-9 CODE NO. 1050-121	6533	6.3	6720-1050	21	---	X2	S5	300	
6152	6.3	4530-1020	29	---	X4	S5	625	Cap=P	6540	6.3	3470-1265	10	---	X4	S5	675	
6159	25.0	7250-0318	12	---	X10	S4	425	Cap=P	6542	OFF	0000-3050	---	---	VR	†S9	150V	
6173	6.3	2700-5060	0	78	SH	S1	400	XDual Triode	6611	1.4	3500-2041	0	0	SH	S1	300	
6186	6.3	4310-5620	10	---	X4	S5	625	XDual Triode	6612	1.4	3500-2041	0	45	SH	S1	400	
6189	12.6	4572-6183	25	---	X2	S5	675	XDual Triode	6626	OFF	0000-5020	---	---	VR	†S9	150V	
6197	6.3	4520-6317	12	---	X10	S5	475	XDual Triode	6627	OFF	0000-5020	---	---	VR	†S9	108V	
6201	12.6	4572-6183	14	---	X4	S5	625	XDual Diode	6659	OFF	0000-1050	0	0	SH	S2	650	
6202	6.3	4300-6170	0	0	SH	S3	650	XDual Diode	6660	6.3	4310-5672	0	---	X4	S5	500	
6203	6.3	4500-9170	0	18	SH	S3	650	XDual Diode	6661	6.3	4310-5627	10	---	X4	S5	425	
6205	6.3	3610-5724	16	---	X4	S5	475	XDual Triode	6662	6.3	4310-5627	10	---	X2	S5	775	
6206	6.3	3610-5724	13	---	X4	S5	475	XDual Triode	6663	6.3	4300-7215	0	78	SH	S1	400	
6211	12.6	4572-6183	23	---	X4	S5	550	XDual Triode	6664	6.3	4360-1070	14	---	X4	S5	625	
6213	OFF	0000-3050	---	---	VR	†S9	130V	{★170V. REGULATION = 5 VOLTS {FROM 1 TO 25 MA	6669	6.3	4310-5620	18	---	X4	S5	575	
6216	6.3	4520-1730	0	---	X10	S4	550	XDual Triode	6676	6.3	4310-5627	10	---	X4	S5	700	
6221	6.3	3610-8050	20	---	X10	S5	525	XDual Triode	6677	6.3	4520-6317	12	---	X10	S5	475	
6222	6.3	3610-8050	21	---	X2	S5	275	XDual Triode	{6678	6.3	4520-6370	12	---	X4	S5	475	
6223	6.3	3610-5780	16	---	X4	S5	475	XDual Triode	{6678	6.3	4590-1080	10	---	X10	S5	525	
6225	6.3	3610-5720	16	---	X4	S5	475	XDual Triode	6679	12.6	4572-6183	14	---	X4	S5	625	
6245	6.3	3470-1265	10	---	X4	S5	675	XDual Triode	6680	12.6	4572-6183	25	---	X2	S5	675	
6247	6.3	3620-8050	11	---	X4	S5	300	XDual Triode	6681	12.6	4572-6183	14	---	X4	S5	200	
6263	6.3	7230-5060	16	---	X10	S5	450	XDual Triode	6688	6.3	4520-7918	8	---	X10	S5	600	
6264	6.3	7230-5060	16	---	X4	S5	425	XDual Triode	6690	6.3	3672-5184	13	---	X10	S5	300	
6265	6.3	4310-5627	10	---	X4	S5	650	XDual Triode	6754	6.3	4500-9173	0	45	SH	S3	650	
R6279	6.3	7200-0080	0	30	SH	S2	425	Top Washer=P	6761	6.3	4520-1730	31	---	X10	S5	475	
6286	1.4	4230-1000	22	---	X2	S4	525	Cap=P	6788	6.3	3610-5720	17	---	X2	S5	250	
6293	6.3	7250-0310	0	---	X10	S4	400	Cap=P									
6308	OFF	0000-3010	---	---	VR	†S9	87V	{★115 V. REGULATION = 3 VOLTS {FROM 1.5 TO 1.5 MA									

TUBE TYPE	FIL	SELECTORS	BIAS	SHUNT	MULT	PRESS	MINIMUM MUT COND	NOTATIONS	TUBE TYPE	FIL	SELECTORS	BIAS	SHUNT	MULT	PRESS	MINIMUM MUT COND	NOTATIONS
6814	6.3	3610-8050	24	---	X4	S5	650	XDual Triode	{7258	12.6	4580-6791	10	---	X10	S5	375	Pent. Sect.
6829	12.6	4572-6183	15	---	X10	S5	425	XDual Triode	{7258	12.6	4520-1736	21	---	X4	S5	700	Triode Sect.
6832	6.3	3672-8154	27	---	X2	S5	325	CAP OVER OCTAL PINS	7308	6.3	4572-6183	21	---	X10	S5	675	XDual Triode
{6850	12.6	5362-0740	15	---	X4	S5	700	23=P	7316	12.6	4572-6183	25	---	X2	S5	675	XDual Triode
{6850	12.6	5326-0140	15	---	X4	S5	700	67=P	7355	6.3	7260-3850	10	---	X10	S5	475	
Use Hickok Adapter Code No. 1050-107									7357	25.0	7250-0318	12	---	X10	S4	425	Cap=P
6872	6.3	3470-1265	17	---	X2	S5	700	Cap=P	7358	6.3	7250-0318	12	---	X10	S4	425	Cap=P
6883	12.6	7250-0318	12	---	X10	S4	425	XDual Diode	7360	6.3	4530-6219	16	---	X2	S5	650	(CONNECT PIN 1 TO PIN 6 AND PIN 6 TO PIN 7 ON LOCAL SOCKET.)
6887	6.3	4300-7215	0	78	SH	S1	400	Cap=P	{7370	20.0	5870-9060	28	---	X10	S5	475	Triode No. 1
6889	6.3	6870-0510	17	---	X10	S5	325	Cap=P	{7370	20.0	8420-1030	28	---	X10	S5	475	Triode No. 2
6900	12.6	4572-9163	28	---	X10	S5	475	XDual Triode	7408	6.3	7250-3481	18	---	X4	S5	575	
6919	6.3	4300-7215	0	78	SH	S1	400	XDual Diode	7543	6.3	4310-5672	10	---	X4	S5	475	
6922	6.3	4572-6183	21	---	X10	S5	675	XDual Triode	7551	12.6	4520-6317	23	---	X10	S5	375	
6928	6.3	4310-5620	18	---	X4	S5	575		7558	6.3	4520-6317	23	---	X10	S5	375	
{6939	12.6	4531-8720	12	---	X10	S5	425	Tetrode No. 1	7581	6.3	2750-3480	17	---	X10	S5	375	
{6939	12.6	4513-6720	12	---	X10	S5	425	Tetrode No. 2	{7586†	6.3	3140-2080	13	---	X10	S4	600	USE ADAPTER SA-3, 1050-127
6943	6.3	3610-5724	11	---	X4	S5	475		Model 752A;								
6944	6.3	3610-5724	9	---	X4	S5	475		{7586	6.3	AC40-2080	13	---	X10	S4	600	{CAP=P, HOLD DOWN S1 AND PRESS S5
6945	6.3	3610-5720	44	---	X4	S5	450		{7587†	6.3	3140-0280	10	---	X10	---	450	{USE ADAPTER SA-3, 1050-127 AND PRESS S5.
6946	6.3	3610-8050	27	---	X4	S5	600		Model 752A;								
6947	6.3	3672-8154	17	---	X4	S5	625	XDual Triode	{7587	6.3	AC40-0280	10	---	X10	---	450	
6948	6.3	3672-8154	16	---	X4	S5	300	XDual Triode	7591	6.3	7260-3450	10	---	X10	S5	500	
6973	6.3	4530-9170	14	---	X10	S5	300		7683	6.3	4510-3820	10	---	X2	S5	500	
7000	6.3	7200-3485	21	---	X2	S5	375	Cap=G	{7687	6.3	4520-6370	10	---	X4	S5	550	Pent. Sect.
7025	12.6	4572-6183	14	---	X4	S5	200	XDual Triode	{7687	6.3	4590-1080	28	---	X4	S5	425	Triode Sect.
7027	6.3	7250-3180	17	---	X10	S5	300		7695	50.0	4560-9170	34	---	X10	S5	450	Cap=G
{7036	6.3	4370-5621	0	---	X2	---	375	AMPL SECT. HOLD DOWN S1 AND PRESS S5	7700	6.3	6100-2354	21	---	X2	S5	375	Pent. Sect.
{7036	6.3	4310-5627	0	---	X2	S5	375	Osc. Sect.	7701	12.6	5420-6910	11	---	X4	S5	550	Triode Sect.
7044	12.6	4572-9163	28	---	X10	S5	475	XDual Triode	{7716	12.6	4570-9860	12	---	X10	S5	425	
7054	12.6	4520-7813	0	---	X10	S5	500		{7716	12.6	4520-3010	12	---	X2	S5	575	Triode Sect.
7055	12.6	4300-7215	0	78	SH	S1	400	XDual Diode	7717	6.3	4310-5620	12	---	X4	---	625	HOLD DOWN S1 AND PRESS S5.
7056	12.6	4310-5627	10	---	X4	S5	700		7719	12.6	5420-1030	30	---	X4	S5	450	Triode Sect.
7057	12.6	4572-6183	17	---	X10	S5	425	XDual Triode	{7724	12.6	4580-9070	10	---	X2	S5	250	XDual Diode
7058	12.6	4572-6183	14	---	X4	S5	200	XDual Triode	{7724	12.6	4500-2631	0	78	SH	S1	400	XDual Triode
{7059	12.6	4520-6370	12	---	X4	S5	475	Pent. Sect.	7728	12.6	4572-6183	14	---	X4	S5	625	XDual Triode
{7059	12.6	4590-1080	10	---	X10	S5	525	Triode Sect.	7729	12.6	4572-6183	14	---	X4	S5	200	XDual Triode
{7060	12.6	4580-6790	11	---	X4	S5	725	Pent. Sect.	7730	12.6	4572-6183	25	---	X2	S5	675	XDual Triode
{7060	12.6	4520-1030	16	---	X4	S5	600	Triode Sect.	{7731	6.3	4520-6370	12	---	X4	S5	475	Pent. Sect.
7061	12.6	4530-9170	18	---	X4	S5	575		{7731	6.3	4590-1080	10	---	X10	S5	525	Triode Sect.
7119	12.6	5472-9163	17	---	X20	S5	500	XDual Triode	7732	6.3	4310-5627	10	---	X4	S5	700	
7137	6.3	4360-7020	15	---	X20	S5	350		7733	12.6	4520-7813	0	---	X10	S5	500	
7167	12.6	4310-5620	12	---	X4	---	525	HOLD DOWN S1 AND PRESS S5	7734	6.3	4580-9170	15	---	X2	S5	650	Pent. Sect.
7189	6.3	5420-7930	12	---	X10	S5	575		{7734	6.3	4530-6020	68	---	X4	S5	550	Triode Sect.
{7199	6.3	4570-2360	7	---	X10	S5	375	Pent. Sect.	7737	6.3	4520-7918	8	---	X10	S5	600	
{7199	6.3	4590-1080	29	---	X2	S5	650	Triode Sect.	7738	6.3	4320-1050	13	---	X10	S5	475	
7212	6.3	7250-0318	12	---	X10	S4	425	Cap=P	7754	6.3	4560-9170	34	---	X10	S5	450	
7233	6.3	4520-9080	29	---	X20	S4	550		7757	6.3	3560-0280	18	---	X4	S5	575	Cap=P
7236	7.5	7841-5263	40	---	X10	S4	550	XDual Triode	7759	25.0	3672-8154	15	---	X10	S5	325	XDual Triode
7239	6.3	4510-0697	30	---	X4	S5	350	Cap=P	7760	25.0	3672-8154	20	---	X4	S4	475	XDual Triode
7247	12.6	4570-6080	14	---	X4	S5	200	Triode No. 1	7761	25.0	3610-5720	15	---	X10	S5	350	
7247	12.6	4520-1030	25	---	X2	S5	675	Triode No. 2									



W. W. Cobb, Paris, Cal.

# READ

101

**ПИСЬМО**

# SUPERHEROES

## Readings in Micrombos

**MODELS ACS1-ACS1X-T53-51-42-54**

# WINE

Don't Worry. We Have No Doubt.  
NE ST 1111 • 1648

**PRICE 25 CENTS**

**The Hickok Electrical Instrument Co.**

10514 Dupont Avenue

CLEVELAND AND OHIO







CC XXB

Tube Type	Select A	Select B	Fill Volts	Potent L	R	Mut. Cond.	Press	Notations
XXD	12	5	12.6	64	0	2500	Ampl. Pli. No. 1 Short on 1-4-5	
XXD	2	9	12.6	64	0	2500	Ampl. Pli. No. 2	
XXL	6	2	6.3	67	0	3000	Ampl.	
XXEM	1	10	6.3	80	0		Rect.	Short 1-4-5

TO TEST MAGIC EYE TUBES:

Press "Amp." Button

6ABS-6ES-6GS-6HS-6NS-6TS-6US.

A 12 3 Eye Open.  
12 2 Eye Closed.

6ADS-6AF6.

A 2 8 Eye No. 1 Open, No. 2 Closed.  
3 8 Eye No. 2 Open, No. 1 Closed.

WE 205D 2 10 5.0 48.27 1250 Amp.

101D 4.3V? 41 26

101K ON 2N

CHART OF OBSOLETE TUBES FOR

AC51 - 51X - T53 - 530 - 510X

TUBE TESTERS

00A 2 10 5 23 27 66 89

Type Tube	A Select	B Select	Volts Fil.	L Potent.	R Potent.	Cond. Mut.	Press	Notations
Q1AA	2	10	5	26	39	725	Ampl.	
G2S	7	7	2.5	25	0		Press Rect. Std. But.	
G2S	5	1	2.5	25	0		Press Rect. Std. But.	
KR2	1	5	2.5	40	0		Press Rect. Std. But.	
G4S	7	7	2.5	25	0		Press Rect. Std. But.	
G4S	5	1	2.5	25	0		Press Rect. Std. But.	
KR5	2	10	5	6.3	60	2000	Ampl.	
WXL2	2	10	1.5	60	36	425	Ampl. OK over 340	
14	7	6	12.6	42	20	1000	Ampl.	
17	1	6	12.6	40	34	1000	Ampl.	
18	8	5	12.6	57	28	1750	Ampl.	
KR20	8	8	2.5	2	30	500	Ampl. No. 1 Grid	
KR20	8	6	2.5	2	30	500	Ampl. No. 2 Grid	
KR22	8	8	6.3	2	30	500	Ampl. No. 1 Grid	
KR22	8	6	6.3	2	30	500	Ampl. No. 2 Grid	
KR25	8	5	2.5	57	28	1750	Ampl.	
29	8	8	2.5	0	19	500	Ampl. No. 1 Grid	
29	8	6	2.5	0	19	500	Ampl. No. 2 Grid	
43MG	8	5	25	62	35	2300	Ampl.	
69	8	8	6.3	0	19	500	Ampl. No. 1 Grid	
69	8	6	6.3	0	19	500	Ampl. No. 2 Grid	
70	8	8	6.3	60	25	300	Ampl. OK over 240	
70	8	6	6.3	60	25	300	Ampl. OK over 240	
85A	7	6	6.3	49	24	1250	Amp. Section	
85A	10	6	6.3	0	0		No. 1 Diode	
85A	10	3	6.3	0	0		No. 2 Diode	
87	2	5	6.3	48	20	1225	Ampl.	
88	2	5	6.3	56	19	1600	Ampl.	
90	8	8	2.5	2	30	500	Ampl. No. 1 Grid	
90	8	6	2.5	2	30	500	Ampl. No. 2 Grid	
92	8	8	6.3	2	30	500	Ampl. No. 1 Grid	
92	8	6	6.3	2	30	500	Ampl. No. 2 Grid	
96	1	5	12.6	40	0		Press Rect. Std. But.	
98	7	7	6.3	40	0		Press Rect. Std. But.	
98	5	1	6.3	40	0		Press Rect. Std. But.	
C171	2	10	3	38	68	1000	Ampl.	
181	2	10	3	38	68	1000	Ampl.	
C182	2	10	5	38	68	1000	Ampl.	
C182A	2	10	5	53	65	1500	Ampl.	
182B	2	10	5	53	48	1500	Ampl.	
183	2	10	5	50	65	1350	Ampl.	
257	1	5	5	49	41	1250	Ampl.	
C373	2	10	3	42	41	1000	Ampl.	
401	2	10	3	42	41	1000	Ampl.	
403	2	10	3	46	72	1200	Ampl.	
482A	2	10	5	50	65	1500	Ampl.	
482B	2	10	5	58	47	1500	Ampl.	
483	2	10	5	50	65	1350	Ampl.	
484	1	6	3	49	30	1300	Ampl.	

WD-11  
WX-12  
181  
C-182  
193  
C373  
483  
484  
etc

99's  
3.0V 2-10 60 45  
0k 0V0+  
340

Arcturus & Cardon

-10-

112D 2-10 3V 57 36 AMP





35W4-5439 25.40 - Rect. Shorten 345  
35W4-5439 25.40 - Rect. Shorten 345

Tube Type	Select. A B	Fil. Volts	Potent. L R	Mut. Cond.	Press	Notations
35L6GT	8 5	35	71 32	5800	Ampl. Left at 70 1/2 for GM	
35Z3	1 1	35	35 0		Rect. Sid.	
35Z4GT	10 2	35	40 0		Rect. Sid.	
35Z5GT	1 3	BLST	40 0		Short Test—Should light on 1-2-3-4-5	
35Z5GT	11 1	35	40 0		Rect. Sid.	
35Z6G	7 2	35	40 0		Rect. Sid. Plate No. 1	
35Z6G	7 5	35	40 0		Rect. Sid. Plate No. 2	
36	7 6	6.3	43 20	1050	Ampl.	
37	1 6	6.3	36 34	900	Ampl.	
38	7 6	6.3	41 32	1050	Ampl.	
39-44	7 6	6.3	41 23	1000	Ampl.	
40	2 10	5	60 26	200	Ampl. OK over 160	
41	8 5	6.3	55 28	1600	Ampl.	
42	8 5	6.3	60 24	2000	Ampl.	
43	8 5	2.5	62 35	2300	Ampl.	
45	2 10	2.5	59 50	1850	Ampl.	
45Z3	1 10	35	40 35		Rect. Sid.	
45Z5GT	11 1	35	40 0		Rect. Sid.	
45Z5GT	1 3	BLST	40 0		Short Test—Should light on 1-2-3-4-5	
46	1 5	2.5	60 25	2000	Ampl.	
47	1 5	2.5	60 18	2000	Ampl.	
48	8 5	2.5	60 48	2000	Ampl.	
49	1 5	2	45 40	1125	Ampl.	
50	2 10	7.5	53 50	1500	Ampl.	
50C6G	8 5	50	74 36	7000	Ampl. Left at 76 1/2 for GM	
50L6GT	8 5	50	74 25	7500	Ampl. Left at 76 1/2 for GM	
50Y6GT	7 2	50	40 0		Rect. Sid. Plate No. 1	
50Y6GT	7 5	50	40 0		Rect. Sid. Plate No. 2	
50Z7G	7 6	50	40 0		Rect. Sid. Plate No. 1	
50Z7G	10 2	50	40 0		Rect. Sid. Plate No. 2-3-4-5	
51	7 6	2.5	42 20	1020	Ampl. Also S15	
52	1 5	6.3	63 27	2400	Ampl.	
53	1 5	2.5	53 10	1500	Ampl. No. 1 Plate	
53	12 5	2.5	53 10	1500	Ampl. No. 2 Plate	
55	7 6	2.5	40 32	975	Ampl.	
55	10 6	2.5	0 0		Diode OK over 500	
55	10 3	2.5	0 0		Diode OK over 500	
56	1 6	2.5	53 26	1450	Ampl.	
57	2 5	2.5	48 17	1225	Ampl. Also S7S	
57A	2 5	6.3	48 17	1225	Ampl. Also S7AS	
58	2 5	2.5	54 20	1450	Ampl. Also S8S	
58A	2 5	6.3	54 20	1450	Ampl. Also S8AS	
59	8 8	2.5	60 18	2000	Ampl.	
70A7GT	8 5	70	71 17	5800	Ampl. Left at 70 1/2 for GM Short on 1-4-5	
70A7GT	11 5	70	0 0		Diode OK over 300	
70L7GT	6 12	70	71 34		Check for Shorts	
70L7GT	7 7	70	71 34	5000	Ampl. Sec. Left at 70 1/2 for GM	
70L7GT	5 1	70	70 70		Rect. Sid.	
71A	2 10	5	56 60	1650	Ampl.	
71A	7 6	6.3	28 9	750	Ampl. Section	
75	10 6	6.3	0 0		Diode	
75	10 3	6.3	0 0		Diode	
75MG	9 5	6.3	28 9	750	Ampl. Section	
75MG	12 2	6.3	0 0		Diode	
75MG	12 5	6.3	0 0		Diode	
76	1 6	6.3	53 24	1450	Ampl.	
77	2 5	6.3	48 17	1225	Ampl.	
78	2 5	6.3	54 20	1450	Ampl.	

83

84

117

VX-199

RECT. PRESS TILL HOT.

Mis.

Tube Type	Select. A B	Fil. Volts	Potent. L R	Mut. Cond.	Press	Notations
79	2 10	6.3	39 12	1000	Ampl. No. 1 Plate	
79	5 10	6.3	39 12	1000	Ampl. No. 2 Plate	
80	2 7	5.0	35 0		Rect. Sid.	
80	3 7	5	35 0		Rect. Sid.	
81	2 7	7.5	33 0		Rect. Sid.	
82	2 7	2.5	40 0		Rect. Sid.	
82V	2 7	2.5	40 0		Rect. Sid.	
82V	3 7	2.5	40 0		Rect. Sid.	
83	2 7	5	40 0		Rect. Sid.	
83V	2 7	5	40 0		Rect. Sid.	
83V	3 7	5	40 0		Rect. Sid.	
84	7 7	6.3	40 0		Rect. Sid.	
84	5 1	6.3	40 0		Rect. Sid.	
85	7 6	6.3	40 32	975	Ampl. Section	
85	10 6	6.3	0 0		Diode	
85	10 3	6.3	0 0		Diode	
89	2 5	6.3	54 30	1550	Ampl.	
99	2 10	3	60 45	425	Ampl. OK over 340	
117L7GT	2 8	117	72 30	4000	Ampl. Short on 1-4-5 Left at 70 1/2 for GM	
117L7GT	5 8	117	40 0		Rect. Sid.	
117M7GT	2 8	117	73 28	6000	Ampl. Short on 1-4-5 Left at 70 1/2 for GM	
117M7GT	5 8	117	40 0		Rect. Sid.	
117N7GT	8 10	117	74 25	7000	Ampl. Left at 76 1/2 for GM	
117N7GT	4 3	117	40 0		Rect. Sid. Also Press 117N7 But.	
117P7GT	8 10	117	70 25	4000	Ampl. Left at 70 1/2 for GM	
117P7GT	4 3	117	40 0		Rect. Sid. also Press 117N7	
117Z6G	2 7	117	75 40		Press 117Z6G RECT.	
117Z6G	10 2	117	75 40		Press 117Z6G RECT. PRESS TILL HOT.	
117Z6G	7 2	117	40 0		Early Tubes Short 1-3	
807	4 7	6.3	71 25	4200	Late Tubes Short 3	
841	2 10	7.5	60 28	350	Ampl. OK over 280	
842	2 10	7.5	46 50	1150	Ampl.	
864	2 10	1.5	18 37	650	Ampl.	
884	7 5	6.3	40 0		Rect. Sid. Strikes at 60 on R	
885	1 6	2.5	40 0		Rect. Sid. Strikes at 60 on R	
950	1 5	2	37 37	950	Ampl.	
951	2 5	2	18 29	640	Ampl.	
1231	5 4	6.3	71 10	4000	Ampl. Left at 70 1/2 for GM	
1232	5 4	6.3	60 15	2000	Ampl.	
1609	1 5	1.5	26 18	725	Ampl.	
1612	1 9	6.3	20 19	650	Ampl. Cap Grid	
1612	8 5	6.3	20 22	650	Ampl. Pin Grid	
1620	1 9	6.3	48 18	1225	Ampl.	
1621	8 5	6.3	60 24	2000	Ampl.	
1622	8 5	6.3	73 19	5000	Ampl. Left at 70 1/2 for GM	
1851	8 5	6.3	71 10	4000	Ampl. Left at 70 1/2 for GM	
1852	4 2	6.3	71 10	4000	Ampl. Left at 70 1/2 for GM	
1853	4 2	6.3	71 10	3500	Ampl. Left at 70 1/2 for GM	
HY113	7 5	1.5	0 40	500	Ampl.	
HY115	7 5	1.5	60 32	370	Ampl. OK over 290	
HY125	7 5	1.5	60 45	450	Ampl. OK over 360	
HY145	7 5	1.5	60 32	370	Ampl. OK over 290	
HY155	7 5	1.5	60 45	450	Ampl. OK over 360	
2050	8 5	6.3	40 0		Rect. Sid. Strikes at 32 on R	
2051	8 5	6.3	40 0		Rect. Sid. Strikes at 32 on R	

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-8-





14AF7 - m XxD

14E7 14F7 14G7 14H7 14J7 14K7 14L7 14M7 14N7 14O7 14P7 14Q7 14R7 14S7 14T7 14U7 14V7 14W7 14X7 14Y7 14Z7

14J

15

25

34

35

Tube Type	Select. A	B	Fill. Volts	Potent. L	R	Mut. Cond.	Press. Notations
12Z5	6	1	6.3	40	0	.....	Check for Shorts
12Z5	1	8	12.6	40	0	.....	Rect. Sid.
12Z5	12	8	12.6	40	0	.....	Rect. Sid.
14B6	2	3	12.6	44	0	1100	Ampl. Triode Sec. Short on 1-4-5
14B6	8	3	12.6	0	0	.....	Diode No. 1
14B6	12	10	12.6	0	0	.....	Diode No. 2
14E7	6	3	12.6	50	20	1300	Ampl.
14E7	1	8	12.6	0	0	.....	Diode
14E7	10	10	12.6	0	0	.....	Diode
14H7	6	2	12.6	67	0	3000	Ampl.
14I7	6	3	12.6	31	15	800	Ampl. Hex. Sec.
14I7	2	8	12.6	42	15	1000	Ampl. Triode Sec.
14Q7	6	2	12.6	31	14	800	Ampl.
14Z3	1	5	12.6	40	0	.....	Rect. Sid.
15	7	6	2	16	18	625	Ampl.
19	8	8	2	42	12	1000	Ampl.
19	11	6	2	42	12	1000	Ampl.
22	2	5	3	0	37	500	Ampl.
22	7	6	2.5	42	10	1000	Ampl. Also 24A
25A6	8	5	25	62	35	2300	Ampl.
25A7	11	5	25	40	0	.....	Check for Shorts
25A7	11	5	25	40	0	.....	Rect. Sid.
25A7	8	5	25	58	35	1800	Ampl.
25AC5	7	5	25	52	0	1500	Ampl.
25B5	8	5	25	64	0	2500	Ampl.
25B6G	8	5	25	71	43	4000	Ampl. Left at 70 1/2 for GM
25B8GT	1	7	25	60	18	2000	Ampl. Pentode Section
25B8GT	11	1	25	54	8	1500	Ampl. Triode Section
25C6G	8	5	25	74	36	7000	Ampl. Left at 70 1/2 for 15000 GM
25D8GT	8	5	25	59	15	1900	Ampl. Pent. Section
25D8GT	11	5	25	45	0	1100	Ampl. Triode Section
25D8GT	5	1	25	0	0	.....	Diode
25L6	8	5	25	75	15	8000	Ampl. Left at 70 1/2 for GM
25N6G	8	5	25	64	0	2500	Ampl.
25X6	7	2	25	40	0	.....	Rect. Sid. Plate No. 1
25X6	7	5	25	40	0	.....	Rect. Sid. Plate No. 2
25Y5	7	8	25	40	0	.....	Rect. Sid.
25Y5	12	8	25	40	0	.....	Rect. Sid.
25Y5	1	5	25	40	0	.....	Rect. Sid.
25Z3	1	5	25	40	0	.....	Rect. Sid.
25Z4	7	2	25	35	0	.....	Rect. Sid.
25Z5	7	8	25	40	0	.....	Rect. Sid.
25Z5	12	8	25	40	0	.....	Rect. Sid.
25Z5MG	7	2	25	40	0	.....	Rect. Sid.
25Z5MG	7	5	25	40	0	.....	Rect. Sid.
25Z6	7	2	25	40	0	.....	Rect. Sid.
25Z6	7	5	25	40	0	.....	Rect. Sid.
26	2	10	1.5	46	35	1150	Ampl.
27	1	6	2.5	40	34	1000	Ampl. Also 27S
30	2	10	2	36	33	900	Ampl.
31	2	10	2	35	925	.....	Ampl.
32	2	5	2	19	30	640	Ampl.
32L7GT	11	5	35	0	0	.....	Test for Shorts
32L7GT	8	5	35	71	18	4800	Ampl. Left at 70 1/2 for GM
32L7GT	11	5	35	40	0	.....	Rect. Sid.
33	1	5	2	50	29	1450	Ampl.
RK33	3	3	6.3	42	28	1000	Ampl.
RK33	9	3	6.3	42	28	1000	Ampl.
34	2	5	2	14	27	600	Ampl.
35	7	8	2.5	42	20	1020	Ampl. Also 35B
35A5	6	2	35	71	15	6000	Ampl. Left at 70 1/2 for GM

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Similar

Tube Type	Select. A	B	Fill. Volts	Potent. L	R	Mut. Cond.	Press. Notations
7F7	2	9	6.3	56	0	1600	Ampl. No. 1 Plate Short on 1
7F7	12	5	6.3	56	0	1600	Ampl. No. 2 Plate
7H7	6	2	6.3	67	0	3000	Ampl. Left at 70 1/2 for GM
7I7	6	3	6.3	31	15	800	Ampl. Hexode Section
7I7	2	8	6.3	42	15	1000	Ampl. Triode Section
7L7	6	2	6.3	60	10	2000	Ampl.
7N7	2	9	6.3	60	13	2000	Ampl. Plate No. 1, Short on 1-4-5
7N7	12	5	6.3	60	13	2000	Ampl. Plate No. 2
7Q7	6	2	6.3	33	17	800	Ampl.
7Q7	6	2	6.3	72	5	4400	Ampl. Left at 70 1/2 for GM
7Y4	1	6	6.3	40	0	.....	Rect. Sid.
7Y4	6	6	6.3	40	0	.....	Rect. Sid.
10	2	10	7.5	50	32	1250	Ampl.
UX-112A	2	10	5	57	36	1650	Ampl.
12A5	1	12	6.3	.....	.....	.....	Check for Shorts
12A5	2	10	12.6	58	42	1800	Ampl.
12A6	8	5	12.6	67	10	3000	Ampl.
12A7	7	6	12.6	39	39	975	Ampl. Pent. Section
12A7	7	3	12.6	40	0	.....	Rect. Sid.
12A8GT	7	7	12.6	41	18	1000	Ampl. Pent. Section
12A8GT	12	7	12.6	60	30	300	Ampl. Osc. Sec. OK over 240
12A8GT	7	9	12.6	60	35	2000	Press Gas No. 1 Short on 2-3
12A8GT	11	9	12.6	60	35	2000	Press Gas No. 1 Short on 3-4-5
12B7	6	2	12.6	59	18	1900	Ampl.
12B8GT	7	2	12.6	0	0	.....	Test for Shorts
12B8GT	1	7	12.6	58	18	1800	Ampl. Pent. Section
12B8GT	11	1	12.6	60	0	2000	Ampl. Triode Section
12C8	7	5	12.6	45	20	1150	Ampl. Pent. Section
12C8	10	5	12.6	0	0	.....	Diode
12C8	10	2	12.6	0	0	.....	Diode
12F5GT	10	5	12.6	41	10	1000	Ampl.
12H6	7	2	12.6	50	0	.....	Diode
12H6	7	5	12.6	50	0	.....	Diode
12J5GT	7	5	12.6	60	24	2000	Ampl.
12J7GT	1	9	12.6	48	18	1225	Ampl.
12K7GT	8	5	12.6	54	20	1450	Ampl.
12K8	8	5	12.6	41	9	1000	Ampl. Hex. Sec.
12K8	11	5	12.6	63	9	2400	Ampl. Triode Sec.
12Q7GT	7	5	12.6	33	14	800	Ampl. Triode Sec.
12Q7GT	10	5	12.6	0	0	.....	Diode
12Q7GT	10	2	12.6	0	0	.....	Diode
12SA7	1	7	12.6	28	17	750	Ampl. No. 1 Grid
12SA7	7	7	12.6	28	17	750	Ampl. No. 2 Grid
12SC7	7	9	12.6	30	0	2000	Rect. Sid.
12SC7	10	9	12.6	30	0	2000	Rect. Sid.
12SF5	7	4	12.6	54	15	1500	Ampl.
12SF7	7	9	12.6	54	0	1500	Rect. Sid. also Press 117N7
12SF7	12	4	12.6	0	0	.....	Diode
12SG7	4	2	12.6	68	10	3300	Ampl.
12S7	4	2	12.6	56	18	1575	Ampl.
12SK7	4	2	12.6	59	18	1900	Ampl.
12SN7GT	8	9	12.6	54	25	1500	Rect. Sid. also press 117N7 But.
12SN7GT	10	4	12.6	54	25	1500	Ampl. Short on 2-3
12SQ7	12	9	12.6	41	82	1000	Diode Button, Triode Sec.
12SQ7	9	4	12.6	0	0	.....	Diode
12SQ7	9	9	12.6	0	0	.....	Diode
12SR7	12	9	12.6	41	82	1000	Diode-Triode Sec.
12SR7	9	4	12.6	0	0	.....	Diode No. 1
12SR7	9	9	12.6	0	0	.....	Diode No. 2
12Z3	1	5	12.6	40	0	.....	Rect. Sid.

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6T

6Z

7A

7B

7C

Tube Type	Select. A	Select. B	Fil. Volts	Potent. L	Potent. R	Mut. Cond.	Press	Notations
6SR7	12	9	6.3	41	82	1000		Diode Triode Sec.
6SR7	9	4	6.3	0	0			Diode No. 1
6SR7	9	9	6.3	0	0			Diode No. 2
6SS7	4	2	6.3	58	16	1850		Ampl.
6T7G	7	5	6.3	40	14	1000		Ampl. Triode Section
6T7G	10	5	6.3	0	0			Diode Button
6T7G	10	2	6.3	0	0			Diode Button
6U6GT	8	5	6.3	73	27	6200		Ampl. Left at 76½ for GM
6U7G	8	5	6.3	56	17	1600		Ampl.
6V6G	8	5	6.3	67	25	3000		Ampl.
6V7G	7	5	6.3	40	32	975		Ampl. Section
6V7G	10	5	6.3	0	0			Diode Button
6V7G	10	2	6.3	0	0			Diode Button
6W5	2	9	6.3	40	0			Rect. Sid.
6W5	10	2	6.3	40	0			Rect. Sid.
6W6GT	8	5	6.3	67	46	3000		Ampl.
6W7G	1	9	6.3	41	20	1000		Ampl.
6X5	2	9	6.3	40	0			Rect. Sid.
6X5	10	2	6.3	40	0			Rect. Sid.
6Y5	9	8	6.3	40	0			Rect. Sid.
6Y5	12	8	6.3	40	0			Rect. Sid.
6Y6G	8	5	6.3	74	36	7000		Ampl. Left at 76½ for 13000 GM
6Y7G	2	9	6.3	39	12	1000		Ampl. No. 1 Plate
6Y7G	12	5	6.3	39	12	1000		Ampl. No. 2 Plate
6Z3	1	5	6.3	40	0			Rect. Sid.
6Z4	7	7	6.3	40	0			Rect. Sid.
6Z4	5	1	6.3	40	0			Rect. Sid.
6Z5	9	12	6.3	40	0			Rect. Sid.
6Z5	12	12	6.3	40	0			Rect. Sid.
6Z7G	2	9	6.3	45	0	1200		Ampl. No. 1 Plate
6Z7G	12	5	6.3	45	0	1200		Ampl. No. 2 Plate
6Z7SG	7	2	6.3	40	0			Rect. Sid.
6Z7SG	7	5	6.3	40	0			Rect. Sid.
7A4	6	2	6.3	66	14	2600		Ampl.
7A5	6	2	6.3	71	23	6000		Ampl. Left at 70½ for GM
7A6	8	5	6.3	40	0			Diode Short 1-4-5
7A6	11	5	6.3	40	0			Diode
7A7	6	2	6.3	58	22	1750		Ampl.
7A8	5	3	6.3	41	20	1000		Ampl. Section
7A8	8	10	6.3	0	21	500		Ampl. Osc. Section
7B4	6	2	6.3	43	10	1000		Ampl.
7B5	6	2	6.3	56	28	1600		Ampl.
7B6	2	3	6.3	28	9	750		Ampl. Sec. Short 1-4-5
7B6	8	3	6.3	0	0			Diode
7B6	6	10	6.3	0	0			Diode
7B7	5	4	6.3	57	22	1700		Ampl.
7B8	5	3	6.3	40	22	1000		Ampl. Pentode Section
7B8	8	10	6.3	0	15	500		Ampl. Osc. Section
7C5	6	2	6.3	67	25	3000		Ampl.
7C6	2	3	6.3	15	8	600		Ampl. Sec. Short 1-4-5
7C6	8	3	6.3	0	0			Diode
7C6	6	10	6.3	0	0			Diode
7C7	6	2	6.3	49	18	1300		Ampl. Section
7E6	2	3	6.3	59	15	1900		Ampl. Sec. Short 1-4-5
7E6	8	3	6.3	0	0			Diode
7E6	12	10	6.3	0	0			Diode
7E7	6	3	6.3	49	18	1300		Ampl. Pent. Section
7E7	1	8	6.3	0	0			Diode
7E7	4	8	6.3	0	0			Diode

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6F

6R

6S

Tube Type	Select. A	Select. B	Fil. Volts	Potent. L	Potent. R	Mut. Cond.	Press	Notations
6D7	7	6	6.3	48	20	1225		Ampl.
6D8G	7	7	6.3	41	22	1000		Ampl. Pentode Section
6D8G	12	7	6.3	60	20	300		Ampl. Osc. Sec. OK over 240
6E6	1	5	6.3	52	23	1400		Ampl. No. 1 Plate
6E6	12	5	6.3	52	23	1400		Ampl. No. 2 Plate
6E7	7	6	6.3	55	20	1500		Ampl.
6F5	10	5	6.3	43	10	1000		Ampl.
6F6	8	5	6.3	60	24	2000		Ampl.
6F7	7	6	6.3	45	23	1100		Ampl. Pent. Section
6F7	10	6	6.3	60	23	450		Ampl. Tri. Sec. OK over 360
6F8G	8	7	6.3	60	13	2000		Ampl. No. 1 Plate
6F8G	11	7	6.3	60	13	2000		Ampl. No. 2 Plate
6G6G	8	5	6.3	61	19	2100		Ampl.
6H4GT	4	8	6.3	50	0			Diode Section
6H6	7	2	6.3	50	0			Diode Button
6H6	7	5	6.3	50	0			Diode Button
6I5G	7	5	6.3	60	24	2000		Ampl.
6I7	1	9	6.3	48	18	1225		Ampl.
6I8G	8	5	6.3	41	15	1000		Ampl. Heptode Section
6I8G	11	5	6.3	0	25	500		Ampl. Triode Section
6K5G	7	5	6.3	40	17	1000		Ampl.
6K6G	8	5	6.3	55	28	1600		Ampl.
6K7	8	5	6.3	54	16	1450		Ampl.
6K8	8	5	6.3	41	9	1000		Ampl. Hexode Section
6K8	11	5	6.3	63	9	2400		Ampl. Triode Section
6L5G	7	5	6.3	56	22	1500		Ampl.
6L6	8	5	6.3	73	19	5000		Ampl. Left at 70½ for GM
6L7	1	9	6.3	20	19	650		Ampl. Cap Grid
6L7	8	5	6.3	20	22	650		Ampl. Pin Grid
6N6MG	8	5	6.3	52	0	1500		Ampl.
6N7	2	9	6.3	53	10	1500		Ampl. No. 1 Plate
6N7	12	5	6.3	53	10	1500		Ampl. No. 2 Plate
6P5G	7	5	6.3	53	24	1450		Ampl.
6P7	3	12	6.3	45	23	1100		Ampl. Pent. Section
6P7	6	12	6.3	60	23	450		Ampl. Tri. Sec. OK over 360
6Q6G	7	5	6.3	40	14	1000		Ampl. Section
6Q6G	7	2	6.3	0	0			Diode Button
6Q7	7	5	6.3	33	14	800		Ampl. Section
6Q7	10	5	6.3	0	0			Diode Button
6Q7	10	2	6.3	0	0			Diode Button
6R7	7	5	6.3	60	17	1900		Ampl. Section
6R7	10	5	6.3	0	0			Ampl. Section
6R7	10	2	6.3	0	0			Diode Button
6S7G	8	5	6.3	57	22	1750		Ampl.
6SA7	1	7	6.3	28	17	750		Ampl. Section
6SA7	7	7	6.3	28	17	750		Ampl. Osc. Section
6SC7	7	9	6.3	35	0	2000		Rect. Sid.
6SC7	10	9	6.3	35	0	2000		Rect. Sid.
6SD7GT	4	2	6.3	64	13	2500		Ampl.
6SF5	7	4	6.3	54	15	1500		Ampl.
6SF7	7	9	6.3	54	0	1500		Rect. Sid. also Press 117N7
6SF7	12	4	6.3	0	0			Diode
6SG7	4	2	6.3	68	10	3300		Ampl. Left at 70½ for GM
6SI7	4	2	6.3	56	18	1575		Ampl.
6SK7	4	2	6.3	59	18	1900		Ampl.
6SN7GT	8	9	6.3	54	25	1500		Rect. Sid. also Press 117N7 But.
6SN7GT	10	4	6.3	54	25	1500		Ampl. Short on 2-3
6SQ7	12	9	6.3	41	82	1000		Diode Button, Amp. Sec.
6SQ7	9	9	6.3	0	0			Diode Button
6SQ7	9	9	6.3	0	0			Diode Button

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Tube Type	Select. A	Select. B	Fil. Volts	Potent. L	Potent. R	Mut. Cond.	Press	Notations
1J5G	8	5	2	37	37	950	Ampl.	
1J6G	8	8	2	42	12	1000	Ampl. No. 1 Plate	
1J6G	11	6	2	42	12	1000	Ampl. No. 2 Plate	
1LA4	6	2	1.5	32	35	800	Ampl.	
1LA6	6	3	1.5	32	20	800	Ampl. Pent. Section	
1LA6	2	8	1.5	60	38	300	Ampl. Osc. Sec. OK over 240	
1LB4	6	2	1.5	38	42	925	Ampl.	
1LC5	6	2	1.5	30	24	775	Ampl. Short on 4-5	
1LC6	6	3	1.5	41	19	1000	Ampl. Pent. Sect.	
1LC6	2	8	1.5	10	19	550	Ampl. Osc. Sect.	
1LD5	6	2	1.5	14	23	600	Ampl. Pent. Sect.	
1LD5	4	9	1.5	0	0	.....	Diode	
1LE3	6	2	1.5	50	0	1300	Ampl.	
1LH4	6	3	1.5	60	13	275	Ampl. Sec. OK over 220	
1LH4	10	10	1.5	0	0	.....	Diode Section	
1LN5	6	2	1.5	28	9	750	Ampl. Short on 4-5	
1NSG	8	5	1.5	28	9	750	Ampl.	
1N6G	8	5	1.5	31	35	800	Ampl.	
1P5G	8	5	1.5	31	9	800	Ampl.	
1Q5G	8	5	1.5	61	30	2100	Ampl.	
1R5	7	7	1.5	19	29	650	Ampl. No. 1 Grid, Short on 4-5	
1R5	1	7	1.5	0	29	500	Ampl. No. 2 Grid	
1S4	4	6	1.5	34	82	850	Diode Button, Short on 3-4-5	
1S5	6	6	1.5	9	28	525	Ampl. Pent. Section	
1S5	3	6	1.5	0	0	.....	Diode	
1SA6GT	3	4	1.5	39	19	950	Ampl.	
1SB6GT	2	5	1.5	20	22	650	Ampl.	
1T4	1	7	1.5	28	28	750	Ampl. Short on 4-5	
1T5GT	8	5	1.5	46	37	1150	Ampl.	
1V	1	5	6.3	40	0	.....	Rect. Std.	
2A3	2	10	2.5	67	55	3000	Ampl.	
2A3H	2	10	2.5	67	55	3000	Ampl.	
2A4G	7	5	2.5	76	0	.....	Press Rect. Std. But. Tube strikes at about 60	
2A5	8	5	2.5	60	24	2000	Ampl.	
2A6	7	6	2.5	28	9	750	Ampl. Section	
2A6	10	6	2.5	0	0	.....	Diode Button	
2A6	10	3	2.5	0	0	.....	Diode Button	
2A7	7	6	2.5	41	18	1000	Ampl. Section	
2A7	10	6	2.5	60	25	400	Ampl. Osc. OK over 320	
2B6	3	2	2.5	15	30	600	Ampl. Input Section	
2B6	7	6	2.5	64	12	2500	Ampl. Output Sec. Short on 3	
2B7	7	6	2.5	41	25	1000	Ampl. Pentode Section	
2B7	10	6	2.5	0	0	.....	Diode Button	
2B7	10	3	2.5	0	0	.....	Diode Button	
2W3	4	11	2.5	33	0	.....	Rect. Std. Button	
2Z2	2	7	2.5	35	0	.....	Rect. Std. Button	
3A8GT	8	5	2.5	28	10	750	Ampl. Pent. Sec. Short on 1	
3A8GT	11	5	2.5	0	10	500	Ampl. Triode Section	
3A8GT	5	1	2.5	0	0	.....	Diode Section	
3B5GT	8	5	2.5	54	49	1500	Ampl. Short on 4-5	
3Q4	4	6	1.5	34	82	850	Press Diode But Short on 3-4-5	
3Q5GT	8	5	3	58	31	1800	Ampl. Short on 4-5	
3S4	4	6	2.5	28	82	750	Press Diode But Short on 3-4-5	
4A6G	2	9	3	41	0	1000	Ampl. No. 1 Plate	
4A6G	12	5	3	41	13	1000	Ampl. No. 2 Plate	
5T4	4	11	5	40	0	.....	Rect. Std.	
5T4	5	11	5	40	0	.....	Rect. Std.	
5U4G	4	11	5	40	0	.....	Rect. Std.	
5U4G	5	11	5	40	0	.....	Rect. Std.	

IV

2

3

5

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6A

6B

6C

6D

Tube Type	Select. A	Select. B	Fil. Volts	Potent. L	Potent. R	Mut. Cond.	Press	Notations
5V4G	4	11	5	40	0	.....	Rect. Std.	
5V4G	5	11	5	40	0	.....	Rect. Std.	
5W4	4	11	5	33	0	.....	Rect. Std.	
5W4	5	11	5	33	0	.....	Rect. Std.	
5X4G	7	9	5	40	0	.....	Rect. Std.	
5X4G	12	4	5	40	0	.....	Rect. Std.	
5Y3	4	11	5	40	0	.....	Rect. Std.	
5Y3	5	11	5	40	0	.....	Rect. Std.	
5Y4G	7	9	5	35	0	.....	Rect. Std.	
5Y4G	12	4	5	35	0	.....	Rect. Std.	
5Z3	3	7	5	40	0	.....	Rect. Std.	
5Z3	3	7	5	40	0	.....	Rect. Std.	
5Z4	4	11	5	40	0	.....	Rect. Std.	
5Z4	5	11	5	40	0	.....	Rect. Std.	
6A3	2	10	6.3	67	55	3000	Ampl.	
6A4	1	5	6.3	60	23	2000	Ampl.	
6A5G	7	5	6.3	67	55	3000	Ampl.	
6A6	1	5	6.3	53	10	1500	Ampl. No. 1 Plate	
6A6	12	5	6.3	53	10	1500	Ampl. No. 2 Plate	
6A7	7	6	6.3	41	18	1000	Ampl. Pent. Section	
6A7	10	6	6.3	60	25	400	Ampl. Osc. Sec. OK over 320	
6A8	7	7	6.3	41	18	1000	Ampl. Pent. Section	
6A8	12	7	6.3	60	30	300	Ampl. Osc. Sec. OK over 240	
6AB6G	8	5	6.3	53	0	1450	Ampl.	
6AC5G	8	5	6.3	40	0	1000	Ampl.	
6AC6G	8	5	6.3	63	0	2400	Ampl.	
6AC7	4	2	6.3	71	10	4000	Ampl. Left at 70 1/2 for GM	
6AD7G	8	5	6.3	60	24	2000	Ampl. Pent. Sect.	
6AD7G	5	5	6.3	60	65	325	Diode Triode Sect. OK over 260	
6AE5G	7	5	6.3	47	56	1200	Ampl.	
6AE6G	7	5	6.3	34	0	850	Ampl. No. 1 Plate	
6AE6G	10	5	6.3	28	0	750	Ampl. No. 2 Plate	
6AE7GT	1	8	6.3	54	27	1500	Ampl. No. 1 Cathode	
6AE7GT	8	8	6.3	54	27	1500	Ampl. No. 2 Cathode	
6AF5G	8	5	6.3	53	42	1500	Ampl.	
6AG7	4	2	6.3	72	15	5000	Ampl. Left at 70 1/2 for GM	
6AH7GT	7	9	6.3	60	35	2000	Press Gas No. 1 Short on 2-3	
6AH7GT	11	9	6.3	60	35	2000	Press Gas No. 1 Short on 3-4-5	
6AL6G	8	5	6.3	73	19	5000	Ampl. Left at 70 1/2 for GM	
6B4G	7	5	6.3	67	55	3000	Ampl.	
6B5	8	5	6.3	52	0	1500	Ampl.	
6B6	7	5	6.3	28	9	750	Ampl. Section	
6B6	10	5	6.3	0	0	.....	Diode Button	
6B6	10	2	6.3	0	0	.....	Diode Button	
6B7	7	6	6.3	41	25	1000	Ampl. Pent. Section	
6B7	10	6	6.3	0	0	.....	Diode Button	
6B7	10	3	6.3	0	0	.....	Diode Button	
6B8	7	5	6.3	42	25	1000	Ampl. Pent. Section	
6B8	10	5	6.3	0	0	.....	Diode Button	
6B8	10	2	6.3	0	0	.....	Diode Button	
6C5	7	5	6.3	60	17	2000	Ampl.	
6C6	1	7	6.3	49	17	1225	Ampl.	
6C7	7	6	6.3	49	24	1250	Ampl. Section	
6C7	10	6	6.3	0	0	.....	Diode Button	
6C7	10	3	6.3	0	0	.....	Diode Button	
6C8G	8	7	6.3	42	14	1000	Ampl. No. 1 Plate	
6C8G	11	7	6.3	42	14	1000	Ampl. No. 2 Plate	
6D5	7	5	6.3	60	47	2000	Ampl.	
6D6	1	7	6.3	56	17	1600	Ampl.	

-3-





*Procters  
Cardon*

Tube Type	Select. A B	Fill. Volts	Potent. L R	Mut. Cond.	Press	Notations
484A	1 6	3	49 30	1300	Ampl.	
485	1 6	3	49 30	1300	Ampl.	
486	1 6	3	60 35	450	Ampl. OK over 360	
585	2 10	7.5	53 50	1500	Ampl.	
586	2 10	7.5	53 50	1500	Ampl.	
C686	1 6	3	60 35	450	Ampl. OK over 360	
P861	7 7	6.3	40 0	.....	Press Rect. Sid. But.	
P861	5 1	6.3	40 0	.....	Press Rect. Sid. But.	
AD	1 5	6.3	40 0	.....	Press Rect. Sid. But.	
AF	.....	.....	.....	.....	Same as 82	
AG	.....	.....	.....	.....	Same as 83	
GA	1 5	5	60 16	2000	Ampl.	
LA	1 5	6.3	60 23	2000	Ampl.	
PZ	1 5	2.5	60 18	2000	Ampl.	
PZH	8 8	2.5	63 25	2400	Ampl.	
RE-1	.....	.....	.....	.....	Same as 80	
RE-2	.....	.....	.....	.....	Same as 81	

64 7 6 6.3 42 26 1050 also 64A

65 7 6 6.3 41 23 1000 also 65A

67 1 6 6.3 40 34 1000 also 67A

68 7 6 6.3 41 32 1050 also 68A

205D 2 10 5 48 27 1250

551 7 6 2.5 42 26 1020

UX-120 A 2 10 3.0

AC-20 15V use 12.6 at high line

A 2 10 20, 25?

# HICKOK TUBE DATA FOR MODELS

AC51-AC51X-T53-510X-530

## TUBE TESTERS

Tube Type	Select. A B	Fill. Volts	Potent. L R	Mut. Cond.	Press	Notations
00A	2 10	5	23 27	666	Ampl.	
0A4G	10 2	.....	50	.....	024 Button	
01A	2 10	5	26 39	725	Ampl.	
024	4 8	.....	.....	.....	Check for shorts	
024	2 9	.....	60 0	.....	024 Button	
024	10 2	.....	60 0	.....	024 Button	
1A4	2 5	2	27 24	750	Ampl.	
1A5G	8 5	1.5	32 35	800	Ampl.	
1A6	1 5	2	0 29	500	Ampl. Section	
1A6	9 7	2	60 29	150	Ampl. Osc. Sec. OK over 120	
1A7G	7 7	1.5	32 20	800	Ampl. Pent. Section	
1A7G	12 7	1.5	60 38	300	Ampl. Osc. Sec. OK over 240	
1B4	2 5	2	18 29	640	Ampl.	
1B5	7 8	2	60 23	475	Ampl. Sec. OK over 360	
1B5	10 8	2	0 0	.....	Diode But.	
1B5	12 3	2	0 0	.....	Diode But.	
1B7G	7 7	1.5	32 20	800	Ampl. Pent. Section	
1B7G	12 7	1.5	60 38	300	Ampl. Osc. Sec. OK over 240	
1C5G	8 5	1.5	55 36	1550	Ampl.	
1C6	1 5	2	20 24	650	Ampl. Section	
1C6	9 7	2	60 41	300	Ampl. Osc. Sec. OK over 240	
1C7G	2 5	2	20 24	650	Ampl. Section	
1C7G	12 7	2	60 41	300	Ampl. Osc. Sec. OK over 240	
1D5G	2 5	2	27 24	750	Ampl.	
1D7G	2 5	2	0 29	500	Ampl. Section	
1D7G	12 7	2	60 35	200	Ampl. Osc. Sec. OK over 160	
1D8GT	8 5	1.5	35 41	925	Ampl. Pent. Section	
1D8GT	11 5	1.5	11 9	575	Ampl. Triode Section	
1E4G	5 1	1.5	0 0	.....	Diode Section	
1E4G	7 5	1.5	32 30	825	Ampl.	
1E5G	2 5	2	18 29	640	Ampl.	
1E7G	8 8	2	45 17	1150	Ampl. No. 1 Plate	
1E7G	11 6	2	45 17	1150	Ampl. No. 2 Plate	
1F4	1 5	2	51 19	1400	Ampl.	
1F5G	8 5	2	51 19	1400	Ampl.	
1F6	1 7	2	20 21	650	Ampl. Section	
1F6	11 1	2	0 0	.....	Diode But. OK over 500	
1F6	5 5	2	0 0	.....	Diode But. OK over 500	
1F7G	1 5	2	20 21	650	Ampl. Pentode Sec.	
1F7G	4 5	2	0 0	.....	Diode Button	
1F7G	7 1	2	0 0	.....	Diode Button	
1G4G	7 5	1.5	33 40	825	Ampl.	
1G5G	8 5	2	54 30	1500	Ampl.	
1G6G	2 9	1.5	22 13	675	Ampl. No. 1 Plate	
1G6G	12 5	1.5	22 13	675	Ampl. No. 2 Plate	
1H4G	7 5	2	36 33	900	Ampl.	
1H5G	8 5	1.5	60 13	275	Ampl. OK over 220	
1H5G	8 1	1.5	0 0	.....	Diode Button	
1H6G	7 8	2	60 23	475	Ampl. Section	
1H6G	10 8	2	0 0	.....	Diode Button	
1H6G	11 3	2	0 0	.....	Diode Button	







# **MODEL 752A** **DYNAMIC MUTUAL CONDUCTANCE** **TUBE TESTER**

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 10514 DUPONT AVENUE • CLEVELAND 8, OHIO

PHONE — 541-8060  
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CABLE — HICKOK, CLEVELAND  
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2490 - 476 (11-64)

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Parts will be made available for a minimum period of five years after the manufacture of this equipment has been discontinued. Parts include all materials, charts, instructions, diagrams, accessories, etc., which have been furnished in the standard model.

## RETURNING EQUIPMENT FOR REPAIR

Before returning any equipment for service, under warranty or otherwise, the factory must first be contacted giving the nature of the trouble. Instructions will then be given for either correcting the trouble or returning the equipment. Upon authorization, this equipment should be forwarded directly to the Hickok factory address, 10636 Leuer Avenue, Cleveland, Ohio, or to a designated service station in your locality. All correspondence pertaining to repairs should be directed to the Hickok office address, 10514 Dupont Avenue, Cleveland 8, Ohio, or to the authorized service station designated.

## REGISTRATION CARD

The above guarantee is contingent upon the attached registration card being returned to the factory immediately upon receipt of the equipment.

THE HICKOK ELECTRICAL INSTRUMENT COMPANY  
Cleveland, Ohio



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## CHAPTER I - INTRODUCTION

### Section 1. 1: General Description

The Hickok Model 752A Tube Tester combines the characteristics of accuracy and dependability together with the advantages of portability and simplicity of operation to meet the needs of those technicians who maintain modern electronic equipment. The design specifications of the Model 752A include the very latest tube-testing techniques to provide an accurate evaluation of the performance capabilities of electron-tubes of the receiving and low power transmitting types.

The Model 752A employs the Dynamic Mutual Conductance test method to evaluate electron tubes of the amplifier type. The results obtained from this test method are indicative of the performance capabilities of a tube in actual equipment operation. The dynamic mutual conductance of the tube under test is quantitatively indicated directly in micromhos on the test meter.

The Model 752A employs a controlled emission test to provide a meaningful evaluation of diode tubes of the rectifier and detector types. The instrument also provides a voltage regulator tube test circuit which permits the testing of voltage regulator tubes in accordance with tube manufacturer's handbook operating conditions.

To insure a complete evaluation of the tube under test, the Model 752A provides three basic fringe tests: (1) An interelement short and leakage test is provided as a preliminary check on all electron-tubes. The resistance of interelement leakage paths is measured directly in ohms on the test meter. (2) A gas test is also provided; this test is an integral step in the evaluation of any amplifier type tube. (3) A life test, which determines the efficiency of the cathode, is provided to forecast the future life of the tube under test.

The outstanding feature of the Model 752A is the dual tube test which permits the testing of electron-tubes containing electrically similar sections with one setting of the selector switches. Each section of the tube is independently tested for interelement leakage, performance capability, and gas by simply depressing an additional push-button which transfers the tube test conditions from one section of the tube to the other. This feature is particularly useful when testing and selecting tubes for use in balanced circuits.

Many new mechanical design features have been incorporated into this tester to facilitate the rapid selection of the proper test conditions for the tube under test. The panel layout is designed to provide a direct correlation between the order in which the roll chart data is presented and the order in which the tube-test selector switches are arranged. This arrangement not only reduces the time needed for testing a tube, but also reduces the possibility of operator-error in setting up the specific tube test conditions. To further reduce the time normally required in testing tubes and to aid in the interpretation of test results, the test meter scales have been simplified. Mutual conductance values are indicated on one basic 0-1500 micromho scale. The Gm of the tube under test can be determined by multiplying the indicated meter reading by the multiplier selector switch setting. Separate meter scales are provided for the interelement leakage and voltage regulator test circuits.

The Model 752A also makes available on its main panel ten of the most commonly used tube sockets. The various tube parameters are applied to the pins of these tube sockets through anti-oscillation wiring by a system of rotary selector switches. These selector switches are numbered in accordance with the EIA system of tube pin designation, and are wired in such a way that they are electrically interlocked to prevent the application to two different test potentials to the same tube pin. This not only prevents damage to the tube under test, but also prevents damage to the tester.

The following special tube adapters are available for use with the Model 752A.

NOMENCLATURE	HICKOK CODE NO.
Adapter: Cathode ray tube	1050-28
Adapter: 2C39C tube	1050-50
Adapter: Long-Lead Subminiature Tube	1050-89
Adapter: 829B tube	1050-107
Adapter: 4X150A/4X250B tube	1050-109
Adapter: 991 tube	1050-118
Adapter: 2C36 tube	1050-119
Adapter: 2-01C tube	1050-120
Adapter: 6263, 6173, 5675 pencil tubes	1050-121

The built-in roll chart provides the test data for all the tubes normally encountered in the servicing of modern electronic equipment. The roll chart is replaceable, and generally it is revised semi-annually to include data on tubes available at the time of each printing. Revised roll charts can be ordered direct from the factory.

Detailed information on the physical and electrical properties of the Model 752A can be found in the Specifications Section 1-2.

To ensure safe, accurate and efficient service from your tube tester, Chapter II (Operating Instructions), should be carefully read and understood.

The Model 752A Tube Testers beginning with Tube Testers bearing serial numbers prefixed with 324, and above, are designed to operate on either 115 volts or 230 volts. They are shipped from the factory to operate on 115 volts. If 230 volt operation is desired, it is necessary to change the wiring of the power transformer from a parallel hook-up to a series hook-up. For 115 volt operation, no modification is necessary. For parallel and series hook-ups, see the schematic wiring diagram in the rear of this manual.

For modification of the Model 752A Tube Tester, from 115 volts to 230 volts, proceed as follows:

a. POWER TRANSFORMER

1. Disconnect the black wire which is connected to the lug marked (w), and disconnect the white-black wire which is connected to the lug marked (x). Both located on transformer.
2. Splice together and solder the two above wires. Insulate connection with electrical insulating tape.
3. Do not disturb other wires which are connected to the lugs marked (w) and (x). Inspect (w) and (x) for good electrical connection.

b. LINE FUSE

1. Replace the No. 81 fuse lamp with a No. 63 lamp.

c. CALIBRATION

1. Plug Tube Tester into a 230 volt a. c. power source and turn on.
2. Rotate LINE ADJUST until the needle on the meter is in the area marked LINE TEST.
3. No further calibration is necessary.

d. For modification from 230 volts to 115 volts, reverse the above procedure.

## Section 1-2: Model 752A Specifications

### I POWER REQUIREMENTS:

- A. Voltage: 115 volts or 230 volts.
- B. Frequency: 60 cycles.
- C. Power Consumption: 40 watts, minimum.  
70 watts, maximum.
- D. Protection: Line fuse (#81 lamp), for 115 volt operation.  
Line fuse (#63 lamp), for 230 volt operation.  
Bias fuse (#49 lamp)

### II TUBE-TEST POTENTIALS:

- A. Plate Voltages: 75 and 150 volts D. C.
- B. Screen Voltages: 56 and 130 volts D. C.
- C. Fixed Bias Voltages: 0 to -40 volts D. C. , adjustable.
- D. Extra Negative Voltage: -40 volts D. C.
- E. Provisions for Self-Bias Tests.
- F. Signal Voltages: 0. 25, 0. 5, 1. 25, 2. 5 volts A. C. ; 60 cycles.
- G. Diode Test Voltage: 20 volts RMS.
- H. V. R. Tube Test Voltages: 0-200 volts D. C. , adjustable.
- I. OZ4 Test Voltage: 287 volts RMS.
- J. Filament Voltages: 0-117 volts A. C. (18 steps).

### III TEST METER:

- A. Mutual Conductance Ranges: 0-1500/3000/6000/15, 000/30, 000  $\mu$  mhos.  
(Readings obtained from basic 0-1500 Gm scale and multiplier switch).
- B. V. R. Test Scales: 0-200 volts D. C.  
0-100 milliamperes.
- C. Leakage Scale: Calibrated in Ohms.

### IV TUBE COMPLEMENT:

<u>Quantity</u>	<u>Type</u>
1 ea.	83
1 ea.	5Y3

### V PHYSICAL SPECIFICATIONS:

- A. Height: 7-1/2"
- B. Width: 18-3/8"
- C. Depth: 16-3/4"
- D. Weight: 25 lbs.
- E. Case: Portable, Black Leatherette Covered.



## NOTES

## CHAPTER II - OPERATING INSTRUCTIONS

### Section 2-1: Panel Components; Identification and Function.

See Figure 1 to locate the various panel components referred to in this section. The functions of these components are described as follows:

#### A. The Controls:

1. The POWER ON-OFF switch controls power input to Model 752A.
2. The LINE ADJUST controls the input voltage to the power transformer for proper standardization of test potentials applied to the tube under test.
3. The FILAMENT VOLTAGE switch provides an 18-step selection of filament or heater voltages from 0.6 volts through 117 volts A. C. An OFF position is also provided for use when testing V. R. tubes and cold cathode rectifiers.
4. Selector switches, FILAMENT (2), GRID A, GRID B, PLATE, SCREEN, CATHODE, and SUPPRESSOR, provide proper switching of the internal circuits to apply the correct test potentials to the various pins of the tube under test.
5. The BIAS control is used to adjust the bias voltage applied to the tube under test.
6. The SHUNT control is a dual potentiometer used to adjust the sensitivity of the meter circuit to the proper level required for testing rectifier and detector type diodes.
7. The MULTIPLIER switch is used to select the proper meter range for the particular type of tube under test. For mutual conductance tests, the MULTIPLIER switch is set to the X1, X2, X4, X10, or X20 position. This extends the full scale range of the basic 0 - 1500 micromho scale to 3000, 6000, 15,000, and 30,000 micromhos respectively. For controlled emission tests on rectifier and detector type diodes, the MULTIPLIER switch is set to the SH or shunt position. This connects the SHUNT potentiometer into the circuit, and this control should then be set to the value indicated on the roll chart. For voltage regulator tests, the MULTIPLIER switch is set to the VR position. In the VR position the test meter becomes a 0-200 VDC voltmeter, and when S-9 is depressed the test meter becomes a 0-100 milliammeter.
8. The LEAKAGE switch, when rotated through positions 1, 2, 3, 4, 5, and 6, connects the various elements of the tube under test across a test voltage. In certain positions of the LEAKAGE switch, tubes having interelement leakage paths will complete the test circuit and cause the pointer of the test meter to move up scale.
9. The ten push-button switches located in the lower righthand portion of the panel actuate the proper test circuit, as indicated on the roll chart. Their designation and function is as follows:
  - a. S1 - DIODE - used when testing low-power diodes, such as the 6H6.
  - b. S2 - 0Z4 - used when testing cold cathode rectifiers, such as the 0Z4.
  - c. S3 - RECT. - used when testing rectifiers, such as the 5Y3, 6X4, etc.
  - d. S4 - LOW PLT. - used when testing amplifier type tubes such as the 1R5 and 1S4.

- e. S5 - RED GM push-button for mutual conductance test on amplifier tubes only. NEVER USE THIS BUTTON WHEN TESTING RECTIFIER TUBES.
  - f. S6 - GAS #1 and S7 - GAS #2 - used when making gas test on amplifier tubes.
  - g. S8 - PLT #2 - used when testing multiunit tubes with electrically similar sections. By depressing S8, the test conditions are transferred from one section of the tube to the other; thus each section can be independently evaluated.
  - h. S9 - V. R. MILS - this switch converts the test meter into a 0-100 milliammeter during the V. R. tests.
  - i. S10 - LINE - used in conjunction with the LINE ADJUST control and LINE TEST point on the meter to standardize tube test potentials.
10. The VR VOLTAGE adjust is used to control the voltage applied to voltage regulator tubes during a VR test.
  11. The LIFE TEST switch is used when making a reserve life test on a tube. When this switch is pressed the filament voltage of the tube under test is reduced by approximately 10% of its normal value. The efficiency of the cathode of the tube under test can then be evaluated and the future life of the tube approximated.
- B. The TEST METER gives a quantitative indication of the tube-test results on three separate scales.
1. The LEAKAGE scale is calibrated in ohms. Interelement leakage paths up through 10 megohms can be measured.
  2. The MICROMHOS scale is used to give a quantitative indication of the results of the Gm, Emission, and Gas tests. The range of the basic 0-1500 micromho scale is extended by use of the MULTIPLIER switch. The readings obtained on this scale, when compared with the recommended rejection values listed in the MINIMUM MUT. COND. column of the roll chart, are indicative of the performance capabilities of the tube under test.
  3. The VOLTS-MILS scale is calibrated in D. C. volts and milliamperes. During V. R. tests, it indicates the striking, operating, and regulating voltage of the V. R. tube, along with the current range over which the tube is regulating.
- C. The TEST SOCKETS are located along the upper edge of the panel and to the left of the test meter. The 15 tube sockets provided will accommodate the following tube-types: In-Line and 8 pin Subminiatures, Octal, Loktal, 7 pin Miniature, 4, 5, 6, and 7 pin Standard, Acorn, and 9/10 pin miniature, 5 pin Nuvistor, 7 pin Nuvistor, Compactron and Novar.
- D. LEADS, LAMPS and CONNECTIONS:
1. Two TEST LEADS are provided to make connections from the G, P and K panel jacks to the top caps of tubes as required. When the leads are not in use, they can be stored in the lead compartment at the top of the case.

The LINE FUSE lamp serves both as a protective device and an overload indicator. This lamp will light brightly when an overload is placed on the tester or the tube under test. When this occurs turn OFF the equipment immediately. The LINE FUSE lamps (#81 or #63 depending upon the input voltage) is mounted in the upper left-hand portion of the main panel where it is readily visible.

3. The BIAS FUSE lamp is connected into the bias supply circuit. It serves as a



protection for the bias potentiometer in case an attempt is made to test a shorted tube. A burned out BIAS FUSE lamp will result in the failure of the test meter to read when the Gm button is pressed. The BIAS FUSE lamp (#49) is mounted in the upper left-hand portion of the main panel where it is readily visible.

4. One red and two black jacks, marked P, G and K respectively, provide connections for the test leads necessary to test tubes with top cap connections.
5. The EXT. SELF BIAS RES. jacks provide the means of making self bias tests. IMPORTANT - the shorting link across the SELF BIAS terminals must be in place when these terminals are not in use.

E. TUBE TEST DATA:

1. All information necessary for properly setting the tube test controls for the various tube types is tabulated on the roll chart in nine columns under the following headings, reading from left to right:
  - a. **TUBE TYPE:** All currently available type numbers for the tubes which the Model 752 is designed to test are listed numerically in this column starting with type 0A2 and continuing through type AX9903.
  - b. **FILAMENT:** Correct filament or heater voltages for the tube type to be tested are shown in this column. The FILAMENT VOLTAGE switch must be adjusted BEFORE inserting a tube in any of the test sockets.
  - c. **SELECTORS:** The tube pin selectors FILAMENT (2), GRID A, GRID B, PLATE, SCREEN, CATHODE, and SUPPRESSOR are to be set in accordance with the two groups of four digit numbers appearing in this column. For example, the selector settings for the 12AT7 are listed as 4572-6183; the selectors are set as follows:

SELECTOR	POSITION NO.
FILAMENT	4
FILAMENT	5
GRID A	7
GRID B	2
PLATE	6
SCREEN	1
CATHODE	8
SUPPRESSOR	3

- d. **BIAS:** This column lists the proper settings for the BIAS dial which controls the bias voltage applied to the tube under test.
- e. **SHUNT:** This column lists the settings for the SHUNT dial which controls the sensitivity of the meter circuit. Adjustment of this dial is only required when the MULTIPLIER switch is in the SH position.
- f. **MULT:** This column lists the position to which the MULTIPLIER switch should be set to provide the proper meter range for the type of tube under test.
- g. **PRESS:** This column lists the proper push-button switches to be pressed to complete the various test circuits applicable to the tube under test.

- h. **MINIMUM MUT. COND:** In this column are the minimum mutual conductance rejection values for amplifier tubes and amplifier sections of multi-purpose tubes. The rejection values for rectifier and detector type diodes are also listed in this column, along with the nominal operating voltage for V.R. tubes.
  - i. **NOTATIONS:** Listed in this column is special information applicable to the tube under test.
2. Incorporated into the instruction book is a section containing tube test data on obsolete tube types.

## Section 2.2: General Operating Procedures.

### A. Preliminary procedures:

1. Remove the line cord from the lead compartment and connect its plug into a power outlet of either 115 volts or 230 volts, 60 cycles, depending upon the mode of operation. See addenda sheet in the front of this manual for correct hook-up of 115 volt operation or 230 volt operation. **NEVER CONNECT THIS EQUIPMENT TO A D. C. POWER SOURCE.**

#### CAUTION

DO NOT INSERT TUBE TO BE TESTED INTO TEST SOCKET UNTIL CORRECT SETTINGS OF ALL CONTROLS HAVE BEEN MADE IN ACCORDANCE WITH THE FOLLOWING STEPS.

2. Operate the thumb gear which turns the roll chart mechanism until the type number of the tube to be tested appears in the roll chart window. A red index line aids in selecting correct data line from the roll chart.
3. Turn the knob of the **FILAMENT VOLTAGE** switch to the voltage indicated on the roll chart under the heading **FIL.**
4. Set the eight tube pin selector switches in accordance with two groups of four digit numbers appearing in the column headed **SELECTORS.**

The selector switches are electrically interlocked in such a way that it is impossible to connect two different voltages to the same tube pin at the same time. Accidental shorts are thus avoided.

5. Set the **BIAS** dial to the numerical setting listed on the roll chart under the heading of **BIAS.**
6. Set the **SHUNT** dial to the numerical setting listed on the roll chart under the heading of **SHUNT.** If no setting of this dial is required, a short dotted line will appear in the column.
7. Set the **MULTIPLIER** switch to the position indicated on the roll chart.
8. Set the **LEAKAGE** switch to the **TUBE TEST POSITION.**
9. Insert the tube to be tested into the proper test socket, and if applicable make top cap connection as called for in **NOTATIONS** column of the roll chart.

10. Set the POWER ON-OFF switch to the ON position.

NOTE: ALLOW SUFFICIENT TIME FOR THE TUBE UNDER TEST TO REACH ITS OPERATING TEMPERATURE BEFORE PROCEEDING.

11. LINE TEST: Depress push-button S10 and rotate the LINE ADJUST control until the test meter pointer indicates to the line marked "Line Test".

B. The LEAKAGE TEST procedures.

1. Rotate the LEAKAGE switch from position number 1 through position number 6, while tapping the tube lightly with your finger and watching the test meter for pointer deflection.

Tubes having interelement shorts and leakage paths will cause the meter pointer to move up scale in various positions of the LEAKAGE switch. A momentary deflection of the test meter pointer when the LEAKAGE switch is turned from one position to the next should be disregarded. These meter pointer deflections are caused by the charging of a capacitor in the leakage test circuit. Intermittent meter pointer deflections as a result of tapping the tube indicates loose elements which might cause noisy or erratic tube operation.

A leakage resistance of 10 megohms will cause the meter pointer to begin to indicate. A complete interelement short will cause the pointer to deflect full scale to give a zero ohms reading. The top scale of the meter is the LEAKAGE scale, and it is calibrated in ohms such that the resistance of leakage paths up to 10 megohms can be read directly from the scale.

2. A shorted tube or one with excessive interelement leakage should be discarded with no further testing.
3. Multisection tubes containing dissimilar sections, such as the 6CG8, should be tested for shorts and leakage on both sections.
4. Multisection tubes containing electrically similar sections, such as the 6J6, can make use of the DUAL TEST circuit.

FOR EXAMPLE: For dual triodes make the normal leakage test as described in step 1 of part (B); then depress push-button S8 and repeat the leakage test for the second section.

5. Table No. 1: Leakage Test Chart, is to be used for identifying interelement leakage paths. In Table No. 1 an (X) under any LEAKAGE switch position represents a meter pointer deflection in that position; thus by referring to the Leakage Path column of Table No. 1 the defective elements can be identified.
6. The circuit used in testing dual triodes is such that the SCREEN selector is used as the plate of the second section, and the SUPPRESSOR selector is used as the cathode of the second section. Thus, plate to plate, and cathode to cathode shorts or leakages will be identified on the Leakage Test Chart as plate to screen, and cathode to suppressor shorts or leakages.
7. Some tubes will show a shorted condition on certain positions of the LEAKAGE switch even though they are good tubes. These positions are noted in the NOTATIONS column of the roll chart. That is, "Short on 1 and 2" means that a short indication on positions 1 and 2 is normal.



TABLE NO. 1: LEAKAGE TEST CHART

LEAKAGE PATH	LEAKAGE SWITCH POSITIONS					
	1	2	3	4	5	6
HEATER - CATHODE	X	X				
HEATER - GRID A			X	X	X	
HEATER - GRID B			X	X	X	X
HEATER - SCREEN			X			
HEATER - SUPPR.		X				
HEATER - PLATE			X	X		
CATH. - GRID A	X	X	X	X	X	
CATH. - GRID B	X	X	X	X	X	X
CATH. - SCREEN	X	X	X			
CATH. - SUPPR.	X					
CATH. - PLATE	X	X	X	X		
GRID A - GRID B						X
GRID A - SCREEN				X	X	
GRID A - SUPPR.		X	X	X	X	
GRID A - PLATE					X	
GRID B - SCREEN				X	X	X
GRID B - SUPPR.		X	X	X	X	X
GRID B - PLATE					X	X
SCREEN - SUPPR.		X	X			
SCREEN - PLATE				X		
SUPPR. - PLATE		X	X	X		

C. **MUTUAL CONDUCTANCE (Gm) Test:** This is the basic quality test for tubes used as amplifiers. After the controls are properly set in accordance with the roll chart data as outlined in Part A of this section, and the tube has been tested for leakage in accordance with Part B of this section, proceed as follows:

1. Set the LEAKAGE switch to the TUBE TEST position.
2. Recheck LINE ADJUST TEST and reset if necessary.
3. Press the Gm push-button S5 and observe the test meter indication.
4. Compare the numerical value of the meter reading on the 0-1500 scale with the minimum acceptable value listed on the roll chart under the column headed MINIMUM MUT. COND.
5. The meter reading can be read directly in micromhos through the use of the MULTIPLIER setting and the basic 0-1500 micromho scale.

NOTE: On special types of amplifier tubes the push-buttons to be used may vary with the particular tube type under test. Always refer to the roll chart for the correct push-buttons to use.

D. **GAS TEST:** The push buttons S6 and S7 are used to test an amplifier tube for gas content. After the tube under test has been tested for Gm proceed as follows:

1. Set the MULTIPLIER switch to the X2 position. This extends the Micromho Scale to the 0-3000 micromho range.
2. Turn the BIAS dial full clockwise to indicate 100.
3. Depress push-button S6 and hold in the down position while adjusting the BIAS dial until the pointer of the meter indicates 100 micromhos on the 0-3000 range.
4. Hold down S6 and depress push-button S7 while observing the meter pointer.
5. If the tube contains gas the pointer of the meter will move up scale. If the pointer movement is not more than two small scale divisions the gas content is negligible.
6. With some tubes, such as the Type 45, the micromho reading cannot be brought down to 100 micromhos by turning the BIAS dial. In such cases turn the BIAS dial clockwise to 100. Test for gas by noting whether the pointer moves more than two divisions up scale when S6 is held down and S7 is depressed.
7. Some tubes will give an indication of gas only after they have been operating for a period of time. If a tube is suspected of being gassy, allow it to heat for a few minutes.

E. **RESERVE LIFE TEST:** This test is used to approximate the future life of the tube. After the mutual conductance test has been made as previously described, proceed as follows:

1. Set the MULTIPLIER switch to the SH position.
2. Turn the SHUNT dial full clockwise to indicate 100.

3. Depress push-button S5 and hold in down position while adjusting the SHUNT dial until the meter pointer indicates to 1000 on the 0-1500 scale.
  4. Hold down S5 and depress the LIFE TEST switch. This switch reduces the filament voltage applied to the tube under test.
  5. If the meter reading remains above mid-scale, the reserve life of the tube under test may be considered satisfactory.
- F. RECTIFIER TUBE TEST: Rectifier tubes, including diode tubes and diode sections of multisection tubes, are tested for emission characteristics since they have no mutual conductance characteristic. The push-button switches S1, S2, and S3 are used to test various types of rectifiers and detector diodes.
1. The push-button switch S1 is used when testing detector diodes. This switch applies a test voltage sufficiently low in magnitude so as not to damage the delicate cathode of the diode under test.
  2. The push-button S2 is used when testing cold cathode rectifiers such as the 0Z4. This switch applies a test voltage sufficiently high to ionize the tube and start conduction.
  3. The push-button S3 is used when testing rectifier tubes such as 5Y3. This switch applies a test voltage of sufficient magnitude to reveal the defects in this type of tube.
- G. DUAL TEST: For multisection tubes containing electrically similar sections, the notation DUAL TRIODE or DUAL DIODE will appear in the NOTATIONS column of the roll chart. When the dual test is called for, the following procedure is applicable.
1. DUAL TRIODE: After the controls are properly set in accordance with the roll chart data as outlined in Part A of this section, proceed as follows.
    - a. Rotate the LEAKAGE switch from position number 1 through position number 6 and observe the test meter for indications of leakage paths.
    - b. Depress push-button S8 and repeat the leakage test for the second section of the tube.
    - c. Set the LEAKAGE switch to the TUBE TEST position.
    - d. Depress push-button S5 - Gm, and observe the test meter for an indication of the Gm of the first section. Release S5.
    - e. A Gas Test for the first section should be performed as described in Part D of this section.
    - f. After the first section has been completely tested, depress push-button S8 and hold in down position while S5 is again depressed and the second section of the tube under test is checked for Gm.
    - h. During testing of each section of a dual triode, the grid of the unused section is kept at cut-off bias by the extra negative bias supply.
  2. DUAL DIODE: The testing of dual diodes is performed as described above with two exceptions.



- a. The diode test push-button (S1, S2, or S3) as called for in the PRESS column of the roll chart is to be used in conjunction with S8.
- b. The Gas Test is not applicable to diodes and rectifiers.

#### H. SPECIAL TUBE TYPES:

1. Voltage Regulator Tubes: The voltage regulator test circuit permits the testing of V. R. tubes under actual operating conditions. The V. R. test circuit measures the voltage drop across the tube under test; hence the striking voltage and the voltage drop for minimum and maximum load currents can be read directly in volts on the test meter.

With the MULTIPLIER switch in the VR position, the VR VOLTAGE dial controls the magnitude of the test voltage applied to the tube. The push-button switch S9 converts the test meter from a voltmeter to a milliammeter. The bottom scale of the meter is used to evaluate the results of the V. R. test. This scale is calibrated in VOLTS (0-200 v. d. c. ) and MILS (0-100 ma. dc. ).

For example, the 0A3:

- a. Set the FILAMENT voltage switch to the OFF position.
- b. Set the tube pin selector switches to 0000-5020.
- c. Set the MULTIPLIER switch to the VR position.
- d. Turn the VR VOLTAGE control fully counter-clockwise.
- e. Turn the LINE ADJUST control fully clockwise.
- f. Insert the 0A3 into its proper test socket and turn the tester ON.
- g. In the NOTATIONS column for the 0A3 is the voltage value 100V with a star in front of it. This notation represents the approximate starting voltage for the VR tube. In the column MINIMUM MUT. COND. is the voltage value 75V. This represents the nominal operating voltage for the VR tube.
- h. Rotate the VR VOLTAGE control slowly clockwise. The meter pointer should begin to indicate. The voltage value is read on the 0-200 volts scale.
- i. When the meter indicates approximately 100 volts, the tube should fire. This will cause the meter pointer to hesitate and drop back to the operating voltage value of the tube under test. In the case of the 0A3, it is 75V.
- j. Depress push-button S9 - V. R. MILS. This converts the test meter from a voltmeter to a milliammeter, and it should indicate approximately 5 MA on the 0-100 MILS scale.
- k. While holding S9 in the down position continue to rotate the VR VOLTAGE control clockwise until the test meter indicates 40 MA.
- l. Release S9 and read the voltage indicated on the test meter. For a good 0A3 the operating voltage should not have risen more than 5 volts above the nominal operating voltage.

2. Certain pentode tubes, such as the 6AJ5, require a low screen voltage and a normal plate voltage during test. This is accomplished by holding down S1 and pressing S5. When applicable, a note is printed on the roll chart under the heading of NOTATIONS: HOLD DOWN S1 AND PRESS S5.
3. Cathode-Ray Tube Test. With the use of the Hickok CRT Adapter, magnetic or electrostatic type T.V. picture tubes having a small shell duo-decal base can be given an interelement leakage test, a cathode emission test, a control grid test, and a gas test.

a. Preliminary Instructions.

- (1) Remove the socket from the cathode-ray tube to be tested.
- (2) Affix the CRT Adapter to the tube to be tested.
- (3) Attach the red lead to the No. 2 anode of the tube under test.
- (4) Insert the 8 pin plug on the cable of the CRT Adapter into the octal tube test socket on the main panel of the Model 752A.

b. Cathode Emission Test.

- (1) Set the selectors and dials as follows:

FIL	SELECTORS	BIAS	SHUNT	MULT	PRESS	MINIMUM MUT.COND.
6.3	7230-5084	0	75	SH	S1	650

- (2) Make an interelement leakage test by rotating the LEAKAGE switch through positions 1 thru 6.
- (3) Set the LEAKAGE switch to the TUBE TEST position.
- (4) Depress S1 and observe the test meter indication. A good tube should read above the recommended reject value noted above.

c. Grid Control and Gas Test.

- (1) Set the selectors and dials as follows:

FIL	SELECTORS	BIAS	SHUNT	MULT	PRESS
6.3	7250-3084	*	0	SH	S6

- (2) Make an interelement leakage test as described above.
- (3) Set the LEAKAGE switch to the TUBE TEST position.
- (4) \* Hold down S6 and rotate the bias dial. If the control grid is functioning, the meter pointer will move up and down scale.
- (5) Gas Test: Adjust Bias control until the test meter reads one small scale division. Hold down S6 and depress S7.

If the meter pointer moves up-scale more than one division, the tube is gassy.

The Hickok CRT Adapter (Code No. 1050-28) is available through Hickok Distributors.

## J. DIODE TESTING:

1. Silicon or Germanium Diodes are tested for their rectification quality. To test these types on the Model 752A Tube Tester, proceed as follows:
  - a. Set the FILAMENT switch to the OFF position.
  - b. Set the tube pin selector switches to 0000-6030.
  - c. Set the LEAKAGE switch to the TUBE TEST position.
  - d. Set the BIAS control to 0 (zero).
  - e. Set the MULTIPLIER switch to the SH position.
  - f. Set the SHUNT control to the 65 dial mark.
  - g. Connect the cathode lead of the diode to pin 3 of the octal test socket and the anode lead of the diode to pin 6 of the octal test socket. (If more convenient, the grid and plate leads supplied with the tester may be used to make these connections.
  - h. Place the POWER ON-OFF switch to the ON position and make line test in the usual manner.
  - i. Depress push button S3 and observe the test meter. The test meter reading should be above 650 to indicate a good diode. A zero test meter reading indicates that the diode is either shorted or open. NOTE: If the test meter indicates down-scale, reverse the diode leads and repeat this step.



## NOTES

## CHAPTER III

## PARTS LIST

## 3-1. INTRODUCTION.

Reference designations are assigned to identify all parts of the Model 752A. These designations are used in the Parts List and Schematic Wiring Diagram. The letter prefix of a reference designation indicates the kind of part -- resistor, capacitor, electron tube, etc. The number differentiates between parts in the same group.

Ref. Desig.	Notes	Name and Description	Hickok Part No.	Price Each
A1		DIAL ASSEMBLY: SHUNT	4160-66	. 65
A2		DIAL ASSEMBLY: BIAS	4160-67	. 65
A3		INDEX ROLLER ASSEMBLY	9600-42	7. 20
C1		NOT ASSIGNED		
C2		CAPACITOR, FIXED, PLASTIC: .5 uf, 200 volts	3105-206	. 35
C3		CAPACITOR, FIXED, PLASTIC: .1 uf, 200 Volts	3105-210	. 20
C4		CAPACITOR, FIXED, ELECTROLYTIC: 8 uf, 350 Volts	3085-68	. 75
C5		CAPACITOR, FIXED, ELECTROLYTIC: 50 uf, 6 Volts	3085-45	. 55
C6		CAPACITOR, FIXED, CERAMIC: .005 uf, -0 +100%, disc type	3110-7	. 20
CR1		RECTIFIER: full wave, copper oxide	18150-42	1. 80
CR2		CRYSTAL: SD91	3870-41	. 60
DS1		LAMP: Roll chart, 7 watt, 115 Volts	12270-41	. 15
DS1		LAMP: #10S6/10, clear, 10 watt, 230 volt, used on rollchart for 230 volt operation	12270-59	. 65
DS2		LAMP: #51 supplied with meter		
DS3		LAMP: #51, supplied with meter.		
E1		BAR: Shorting	2145-2	. 15
F1		LAMP: #81 auto tungsol, bayonet base (LINE FUSE) for 115 volt operation	12270-2	. 10
F1		LAMP: #63 bayonet base for 230 volt operation	12270-58	. 25
F2		LAMP: #49 pilot, bayonet base, (BIAS FUSE)	12270-17	. 10
M1		METER: Model 68	680-045	17. 94
MP1		BUTTON: push, black	2920-7	. 10
MP2		BUTTON: push, red	2920-8	. 10
MP3		BUTTON: push, green	2920-13	. 10
MP4		KNOB: phenolic, black	11505-55	. 15
MP5		Same as MP4		

Ref. Desig.	Notes	Name and Description	Hickok Part No.	Price Each
MP6		Same as MP4		
MP7		Same as MP4		
MP8		Same as MP4		
MP9		Same as MP4		
MP10		Same as MP4		
MP11		Same as MP4		
MP12		Same as MP4		
MP13		Same as MP4		
MP14		Same as MP4		
MP15		Same as MP4		
MP16		KNOB: machined, bar type, with white dot and pointer	11500-11	. 15
MP17		Same as MP1		
MP18		Same as MP1		
MP19		Same as MP1		
MP20		Same as MP1		
MP21		Same as MP1		
MP22		Same as MP1		
MP23		Same as MP1		
P1		CORD: AC Line	3675-34	. 80
J1		JACK: pin plug type, red, (PLATE)	10300-1	. 10
J2		JACK: pin plug type, black, (GRID)	10300-2	. 10
J3		BINDING POST	2360-51	. 50
J4		Same as J3		
J5		Same as J2, (CATHODE)		
R1		RESISTOR: 100 ohms, 10%, 10 Watt, center tapped	18575-19	1. 15
R2		RESISTOR, FIXED: 215K ohms, 1%, 1/2 Watt	18537-61	. 55
R3		RESISTOR, FIXED: 270 ohms, 5%, 1/2 Watt	18411-271	. 25
R4		NOT ASSIGNED		
R5		POTENTIOMETER: 50K ohms, screw driver slot	16925-473	1. 00
R6		RESISTOR, FIXED: 200 ohms, 1%, 2 Watt	18540-5	. 95
R7		Same as R1		
R8		RESISTOR, FIXED: 180K ohms, 10%, 1/2 Watt	18414-182	. 10



Ref. Desig.	Notes	Name and Description	Hickok Part No.	Price Each
R9		RESISTOR, FIXED: 2 megohms, 5%, 1/2 Watt	18415-201	. 25
R10		POTENTIOMETER: 500 ohms	16925-376	1. 00
R11		RESISTOR, FIXED: 470K ohms, 1%, 1/2 Watt	18537-66	. 55
R12		RESISTOR, FIXED: 470 ohms, 5%, 2 Watt	18431-471	. 50
R13		RESISTOR, SPOOL: 10 ohms	18670-105	1. 00
R14		RHEOSTAT: 10,000 ohms, 50 Watt	18750-26	5. 15
R15		RESISTOR, FIXED: 2920 ohms, 1%, 1/2 Watt	18537-67	. 55
R16		RESISTOR, FIXED: 1200 ohms, 10%, 1 Watt	18422-122	. 20
R17		RESISTOR, FIXED: 1800 ohms, 10%, 10 Watt	18575-12	. 65
R18		RHEOSTAT: 350 ohms, 25 Watt	18750-37	3. 50
R19		RESISTOR, FIXED: 12 ohms, 1%, 1/2 Watt	18537-59	. 65
R20		POTENTIOMETER: 50 ohms	16925-271	1. 00
R21		RESISTOR, FIXED: 119 ohms, 1%, 1/2 Watt	18537-62	. 55
R22		RESISTOR, FIXED: 47 ohms, 10%, 1/2 Watt	18410-472	. 10
R23		RESISTOR, FIXED: 41 ohms, 1%, 1/2 Watt	18537-60	. 65
R24		Same as R23		
R25		RESISTOR, FIXED: 15,000 ohms, 5%, 1 Watt	18423-151	. 35
R26		Same as R21		
R27		RESISTOR: wire wound, 8500 ohms, 10%, 10 Watt	18575-89	1. 60
R28		POTENTIOMETER: adjusted, 3000 ohms	16926-5	6. 20
R29 - R30		POTENTIOMETER: 150-150 ohms, wire wound	16925-90	3. 00
R31		RESISTOR, FIXED: 500 ohms, 1%, 1/2 Watt	18537-58	. 55
R32		RESISTOR, FIXED: 250 ohms, 1%, 1/2 Watt	18537-63	. 55
R33		RESISTOR, FIXED: 150 ohms, 1%, 1/2 Watt	18537-64	. 55
R34		RESISTOR, FIXED: 50 ohms, 1%, 1/2 Watt	18537-65	. 65
R35		Same as R34		
R36		RESISTOR, FIXED: 200K ohms, 1%, 1/2 Watt	18537-46	. 55
R37		RESISTOR, FIXED: 1000 ohms, 10%, 1/2 Watt	18412-102	. 10
S1		SWITCH: push type, (DIODE)	19910-132	6. 95
S2		Same as S1 (OZ4)		
S3		Same as S1 (RECT)		
S4		Same as S1 (LOW PLATE)		

Ref. Desig.	Notes	Name and Description	Hickok Part No.	Price Each
S5		Same as S1 (Gm)		
S6		Same as S1 (GAS 1)		
S7		Same as S1 (GAS 2)		
S8		Same as S1 (PLATE 2)		
S9		Same as S1 (VR MILS)		
S10		Same as S1 (LINE ADJ)		
S11		SWITCH: toggle, S. P. S. T.	19911-9	. 50
S12		SWITCH: push button, D. P. D. T. (LIFE TEST)	19910-118	1. 50
S13		SWITCH, ROTARY: 2 section, 3 pole, 20 position (FILAMENT)	19912-386	4. 50
S14		SWITCH, ROTARY: 1 section, interlocking, 14 position (FILAMENT)	19912-477	5. 25
S15		Same as S14 (FILAMENT)		
S16		Same as S14 (GRID A)		
S17		Same as S14 (GRID B)		
S18		Same as S14 (PLATE)		
S19		Same as S14 (SCREEN)		
S20		SWITCH, ROTARY: 1 section, 14 position (CATHODE)	19912-469	3. 95
S21		Same as S20		
S22		SWITCH, ROTARY: 5 section, 7 position (MULTIPLIER)	19912-374	5. 25
S23		SWITCH, ROTARY: 5 section, 7 position (LEAKAGE)	19912-373	5. 25
T1		TRANSFORMER: power	20800-304	16. 00
V1		TUBE: #83	20875-28	3. 50
V2		TUBE: #5Y3GT/G	20875-6	1. 75
W1		LEAD ASSEMBLY:	12450-145	. 95
W2		LEAD ASSEMBLY:	12450-180	1. 15
XDS1		SOCKET: bayonet, small	19350-1	. 30
XF1		SOCKET: bayonet, miniature	19350-203	. 35
XF2		SOCKET: Candelabra	19350-2	. 30
XV1		SOCKET: wafer, octal	19350-156	. 25
XV2		SOCKET: wafer, 4 pin	19350-157	. 25
X1		SOCKET: 4 pin	19350-93	. 20
X2		SOCKET: 5 pin	19350-94	. 25

Desig.	Notes	Name and Description	Hickok Part No.	Price Each
X3		SOCKET: 6 pin	19350-95	. 30
X4		SOCKET: 7 pin	19350-270	. 65
X5		SOCKET: 8 pin octal	19350-97	. 35
X6		SOCKET: 8 pin, loctal	19350-99	. 30
X7		SOCKET: 7 pin	19350-136	. 65
X8		SOCKET: Acorn, 7 contact	19350-43	1. 60
X9		SOCKET: 10 pin	19350-364	. 25
X10		SOCKET: Combination, 7-8 pin	19350-220	. 85
X11		SOCKET: In Line	19351-16	1. 00
X12		SOCKET: Nuvistor, 5 pin	19350-336	. 25
X13		SOCKET: 9 pin	19350-367	. 25
X14		SOCKET: Compactron	19350-365	. 25
X15		SOCKET: Nuvistor, 7 pin	19350-382	. 25
		BOOKLET: INSTRUCTIONS	2490-476	1. 50

NOTE: A minimum billing charge of \$3. 50 will be assessed for any parts order.  
Prices are subject to Change without notice.



## CHAPTER IV - SUPPLEMENTARY TEST DATA

### Section 4. 1: Supplementary Test Data

The following tables provide test data for testing ger-

manium diodes and test data for obsolete vacuum tubes, neither of which appear on the roll chart. All listings are in alpha-numerical order.

### TESTING GERMANIUM DIODES ON THE MODEL 752A TUBE TESTER

Two tests only are made on these diodes in the following order:

1. Forward conduction and rectification.
2. Reverse conduction.

For the Forward Conduction and Rectification test connect the cathode end of the diode to the octal test socket pin No. 3 and connect the other end to the octal test socket pin No. 6. The grid and plate leads supplied with the tester may be used for these connections. If the meter reads backwards, reverse the diode. The diode will then be properly connected for the Reverse Conduction test also.

TUBE	FIL	SELECTORS	BIAS	SHUNT	MULT.	PRESS	MIN. MUT. COND.	NOTATIONS
1N34	OFF	0000-6030	100	60	SH	S3	650	Forward Conduction and Rectification Reverse Conduction
1N34	OFF	0060-3000	100	0	SH	S1	---	
1N34 is OK if reading is less than 300.								
1N38	OFF	0000-6030	100	67	SH	S3	650	Forward Conduction and Rectification Reverse Conduction
1N38	OFF	0060-3000	100	0	SH	S1	---	
1N38 is OK if reading is less than 125.								
1N48	OFF	0000-6030	100	67	SH	S3	650	Forward Conduction and Rectification Reverse Conduction
1N48	OFF	0060-3000	100	0	SH	S1	---	
1N48 is OK if reading is less than 550.								
1N91	OFF	0000-6030	100	68	SH	S3	650	Forward Conduction and Rectification Reverse Conduction
1N91	OFF	0060-3000	100	0	SH	S1	---	
1N91 is OK if reading is less than 750.								
1N93	OFF	0000-6030	100	69	SH	S3	650	Forward Conduction and Rectification Reverse Conduction
1N93	OFF	0060-3000	100	0	SH	S1	---	
1N93 is OK if reading is less than 125.								

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Supplementary Tube Test Data for Obsolete Tube Types

TUBE TYPE	FIL.	SELECTORS	BIAS	SHUNT	MULT.	PRESS	MIN. MUT. COND.	NOTATIONS
1A4	2.0	4100-2300	18	---	X2	---	225	CAP= G. Hold down S1 and Press S5
1A6	2.0	6100-2504	12	---	X2	---	225	Pent. Sect. CAP= G Hold down S1 and Press S5
1A6	2.0	6140-3502	25	---	X1	S5	125	Osc. Sect.
1AB5	1.1	8160-2300	0	---	X2	S5	375	
1B5	2.0	6150-2000	10	---	X1	S5	350	Triode Sect.
1B5	2.0	6100-4300	0	40	SH	S1	400	X Dual Diode
1B7	1.4	7200-3405	4	---	X2	---	300	Pent. Sect. CAP= G Hold down S1 and Press S5
1B7	1.4	7250-6403	17	---	X2	---	200	Osc. Sect. Hold down S1 and Press S5
1C6	2.0	6100-2534	13	---	X2	---	250	Ampl. Sect. CAP= G Hold down S1 and Press S5
1C6	2.0	6140-3520	28	---	X1	S5	150	Osc. Sect.
1C7	2.0	7200-3465	13	---	X2	---	250	Pent. Sect. CAP= G Hold down S1 and Press S5
1C7	2.0	7250-6430	28	---	X1	S5	150	Osc. Sect.
1C8	1.1	4520-7608	40	---	X1	S5	175	
1D7	2.0	7200-3465	12	---	X2	---	225	Pent. Sect. CAP= G Hold down S1 and Press S5
1D7	2.0	7250-6430	25	---	X1	S5	125	Osc. Sect.
1D8	1.4	7250-3460	18	---	X2	---	275	Pent. Sect. Hold down S1 and Press S5
1D8	1.4	7200-6000	0	---	X1	S5	350	Triode Sect. CAP= G
1D8	1.4	7200-8000	0	0	SH	S1	400	Diode Sect.
1E4	1.4	7250-3000	25	---	X2	S5	375	
1E5	2.0	7200-3400	15	---	X1	S5	400	CAP= G
1E7	2.0	7250-6834	11	---	X2	S5	350	Pent. No. 1
1E7	2.0	7240-3865	11	---	X2	S5	350	Pent. No. 2
1F4	2.0	5130-2400	22	---	X2	S5	425	
1F5	2.0	7250-3400	22	---	X2	S5	425	
1F6	2.0	6100-2300	8	---	X2	---	200	Pent. Sect. CAP= G Hold down S1 and Press S5
1F6	2.0	6100-5400	8	0	SH	S1	400	X Dual Diode
1F7	2.0	7200-3600	8	---	X2	---	200	Pent. Sect. CAP= G Hold down S1 and Press S5
1F7	2.0	7200-4530	8	0	SH	S1	400	X Dual Diode
1G4	1.4	7250-3000	48	---	X2	S5	250	
1G5	2.0	7250-3040	16	---	X2	---	475	Hold down S1 and Press S5
1G6	1.4	7254-6300	19	---	X2	S5	200	X Dual Triode
1H4	2.0	7250-3000	40	---	X2	S5	275	
1J5	2.0	7250-3400	46	---	X2	S5	300	
1J6	2.0	7254-6300	23	---	X2	S5	300	X Dual Triode
1LB6	1.4	8160-2437	Use this setting for Short Check only					
1LB6	1.4	8160-3574	22	---	X1	S5	300	
1N6	1.4	7250-3400	40	---	X2	S5	250	Pentode Sect.
1N6	1.4	7200-6000	0	0	SH	S1	400	Diode Sect.
1P5	1.4	7200-3400	12	---	X2	S5	250	CAP= G
1R4	1.4	8100-4070	0	48	SH	S1	400	
1SA6	1.4	7240-8630	0	---	X2	---	250	Hold down S1 and Press S5
1SB6	1.4	7280-3400	12	---	X1	S5	400	Pentode Sect.
1SB6	1.4	7280-5000	0	0	SH	S1	400	Diode Sect.
1T5	1.4	7250-3400	44	---	X2	S5	350	
2A4	2.5	7250-3000	#	93	SH	S6	650	Strikes at about 44
2A5	2.5	6140-2350	23	---	X2	S5	625	
2A6	2.5	6100-2050	11	---	X4	S5	175	Triode Sect. CAP= G
2A6	2.5	6100-4350	11	32	SH	S1	400	X Dual Diode
2A7	2.5	7100-2365	0	---	X2	S4	300	Pent. Sect. CAP= G
2A7	2.5	7150-4362	22	---	X1	S5	225	Osc. Sect.
2B4	2.5	5130-2040	#	93	SH	S6	650	Strikes at about 58
2B6	2.5	7140-2360	18	---	X2	S5	475	

## Supplementary Tube Test Data for Obsolete Tube Types

TUBE TYPE	FIL	SELECTORS	BIAS	SHUNT	MULT.	PRESS	MIN. MUT. COND.	NOTATIONS
2B22	6.3	7200-0080	0	30	SH	S3	650	Top Washer = P
2C4	2.5	7130-5040	#	93	SH	S6	650	Strikes at about 72
2C22	6.3	7200-0080	23	---	X4	S5	475	Far CAP= G
2C26	6.3	7200-0080	13	---	X2	S5	550	Near CAP= P
2C40	6.3	7200-0080	20	---	X4	S5	425	Right CAP= P
2E5	2.5	6150-4030	0	100	SH	S5	---	Left CAP= G
2E5	2.5	6150-4230	0	100	SH	S5	---	CAP= P. Ring = G
2V3	2.5	7200-0000	0	78	SH	S6	650	Eye Open
2W3	2.5	8200-4000	0	0	SH	S3	400	Eye Closed
2Z2	2.5	4100-2000	0	0	SH	S3	400	CAP= P
3A8	2.5	7200-3400	17	---	X2	S5	225	Pentode Sect. CAP= G
3A8	2.5	7250-6000	0	---	X1	S5	175	Triode Sect.
3A8	2.5	7200-8000	0	32	SH	S1	400	Diode Sect.
3B5	2.5	7250-3400	33	---	X2	S4	425	
3B7	2.5	1860-7000	27	---	X2	S5	475	Triode No. 1
3B7	2.5	8130-2000	27	---	X2	S5	475	Triode No. 2
3C6	2.5	1850-6000	10	---	X2	S4	350	Triode No. 1
3C6	2.5	8140-3000	10	---	X2	S4	350	Triode No. 2
5AX4	5.0	8200-6000	0	36	SH	S3	400	Plate No. 1
5AX4	5.0	8200-4000	0	27	SH	S3	400	Plate No. 2
5X3	5.0	4100-3000	0	34	SH	S3	400	Plate No. 1
5X3	5.0	4100-2000	0	20	SH	S3	400	Plate No. 2
6A4	6.3	5130-2400	28	---	X2	S5	625	
6AB5	6.3	6150-4030	0	100	SH	S5	---	Eye Open
6AB5	6.3	6150-4230	0	100	SH	S5	---	Eye Closed
6AB6	6.3	7250-3480	0	---	X2	S5	450	
6AC6	6.3	7250-3480	0	---	X2	S5	750	
6AD6	6.3	7240-3580	0	100	SH	S5	---	Eye 1 Open, Eye 2 Closed
6AD6	6.3	7230-4580	0	100	SH	S5	---	Eye 2 Open, Eye 1 Closed
6AE5	6.3	7250-3080	72	---	X2	S5	375	
6AE6	6.3	7250-4083	0	---	X2	S5	225	Triode No. 1
6AE6	6.3	7250-3084	0	---	X2	S5	250	Triode No. 2
6AE7	6.3	7260-3084	33	---	X2	S5	475	Triode No. 1
6AE7	6.3	7240-3056	33	---	X2	S5	475	Triode No. 2
6AF5	6.3	7250-3080	52	---	X2	S5	475	
6AH5	6.3	7260-4180	17	---	X10	S5	300	
6AJ7	6.3	7240-8653	15	---	X10	S5	375	
6AK7	6.3	7240-8651	12	---	X10	S5	475	
6AW7	6.3	7820-6010	10	---	X4	S5	175	Triode Sect.
6AW7	6.3	7800-3451	0	76	SH	S1	400	X Dual Diode
6AX6	6.3	7200-5384	0	58	SH	S3	650	X Dual Diode
6B5	6.3	6140-2350	0	---	X2	S5	525	
6B6	6.3	7200-3080	11	---	X4	S5	175	Triode Sect. CAP= G
6B6	6.3	7200-5480	11	32	SH	S1	400	X Dual Diode
6B8	6.3	7200-3681	22	---	X2	S5	300	Pent. Sect. CAP= G
6B8	6.3	7200-5481	22	32	SH	S1	400	X Dual Diode
6C7	6.3	7100-2060	26	---	X2	S5	375	Triode Sect. CAP= G
6C7	6.3	7100-5460	26	30	SH	S1	400	X Dual Diode
6C8	6.3	7205-3648	15	---	X2	S5	500	X Dual Triode CAP= G
6D5	6.3	7250-3080	57	---	X2	S5	625	
6D7	6.3	7100-2364	21	---	X2	S5	375	CAP= G
6D8	6.3	7200-3485	0	---	X2	S4	300	Pent. Sect. CAP= G
6D8	6.3	7250-6483	22	---	X1	S5	225	Osc. Sect.
6E6	6.3	7153-6240	51	---	X2	S5	425	X Dual Triode
6E7	6.3	7100-2364	17	---	X2	S5	500	CAP= G
6G5	6.3	6150-4030	0	100	SH	S5	---	Eye Open
6G5	6.3	6150-4230	0	100	SH	S5	---	Eye Closed
6H4	6.3	7200-4080	0	73	SH	S1	400	
6K5	6.3	7200-3080	15	---	X4	S5	225	CAP= G
6N5	6.3	6150-4030	0	100	SH	S5	---	Eye Open
6N5	6.3	6150-4230	0	100	SH	S5	---	Eye Closed



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TUBE TYPE	FIL	SELECTORS	BIAS	SHUNT	MULT.	PRESS	MIN. MUT. COND.	NOTATIONS
6N6	6.3	7250-3480	0	---	X2	S5	525	
6P7	6.3	2300-4586	18	---	X2	S5	350	Pent. Sect. CAP= G
6P7	6.3	2370-6084	35	---	X2	S5	150	Triode Sect.
6Q6	6.3	7200-3080	13	---	X2	S5	300	Triode Sect. CAP= G
6Q6	6.3	7200-5480	13	30	SH	S1	400	X Dual Diode
6SZ7	6.3	7820-6031	15	---	X4	S5	175	Triode Sect.
6SZ7	6.3	7800-5431	0	30	SH	S1	400	X Dual Diode
6T5	6.3	6150-4030	0	100	SH	S5	---	Eye Open
6T5	6.3	6150-4230	0	100	SH	S5	---	Eye Closed
6T7	6.3	7200-3080	13	---	X2	S5	300	Triode Sect. CAP= G
6T7	6.3	7200-5480	13	30	SH	S1	400	X Dual Diode
6U7	6.3	7200-3485	17	---	X2	S5	500	CAP= G
6V7	6.3	7200-3080	42	---	X2	S5	300	Triode Sect. CAP= G
6V7	6.3	7200-5480	42	30	SH	S1	400	X Dual Diode
6W5	6.3	7200-5380	0	20	SH	S3	650	X Dual Diode
6W7	6.3	7200-3485	21	---	X2	S5	375	CAP= G
6Y5	6.3	6100-5340	0	58	SH	S3	650	X Dual Diode
6Y7	6.3	7254-6380	13	---	X2	S5	300	X Dual Triode
6Z7	6.3	7254-6380	14	---	X2	S5	375	X Dual Triode
7AB7	6.3	7250-3140	10	---	X4	S5	250	
7AJ7	6.3	8160-2374	8	---	X4	S5	350	
7B5	6.3	8160-2370	17	---	X4	S5	375	
7B6	6.3	8130-2070	11	---	X4	S5	175	Triode Sect.
7B6	6.3	8100-6572	0	30	SH	S1	400	X Dual Diode
7B8	6.3	8160-2574	0	---	X2	S4	300	Pent. Sect.
7B8	6.3	8140-3576	22	---	X1	S5	225	Osc. Sect.
7C4	6.3	8100-4070	0	70	SH	S1	400	
7G8	6.3	8150-7362	11	---	X4	S5	325	Tetrode No. 1
7G8	6.3	8140-2367	11	---	X4	S5	325	Tetrode No. 2
7S7	6.3	8160-2574	16	---	X2	S5	475	Heptode Sect.
7S7	6.3	8140-3075	14	---	X2	S5	525	Triode Sect.
7T7	6.3	8160-2374	10	---	X4	S5	475	
10	7.5	4130-2000	44	---	X2	S5	375	
10Y	7.5	4130-2000	44	---	X2	S5	375	
12A	5.0	4130-2000	48	---	X2	S5	525	
12A5	12.6	7140-2350	38	---	X2	S5	550	
12A6	12.6	7250-3481	18	---	X4	S5	475	
12B8	12.6	7200-3410	18	---	X4	S5	275	Pent. Sect. CAP= G
12B8	12.6	7280-5060	7	---	X4	S5	300	Triode Sect.
12F5	12.6	7200-4080	12	---	X4	S5	225	CAP= G
12SW7	12.6	7820-6031	21	---	X2	S5	600	Triode Sect.
12SW7	12.6	7800-5436	0	30	SH	S1	400	X Dual Diode
12SX7	12.6	7841-5263	23	---	X4	S5	400	X Dual Triode
12SY7	12.6	7280-3465	10	---	X4	---	150	Ampl. Sect. Hold down S1 and Press S5
12SY7	12.6	7250-4068	22	---	X4	S5	625	Osc. Sect.
12Z3	12.6	4100-2030	0	35	SH	S3	650	
12Z5	6.3	6100-5040	0	30	SH	S3	650	Plate No. 1
12Z5	6.3	2100-3040	0	30	SH	S3	650	Plate No. 2
14A4	12.6	8160-2070	23	---	X4	S5	400	
14A5	12.6	8160-2370	18	---	X4	S5	475	
14E7	12.6	8160-2570	20	---	X4	S5	200	Pent. Sect.
14E7	12.6	8100-4372	0	30	SH	S1	400	X Dual Diode
14Z3	12.6	4100-2030	0	35	SH	S3	650	
15	2.0	5100-2340	0	---	X2	---	225	CAP= G. Hold down S1 and Press S5
19	2.0	6143-5200	23	---	X2	S5	300	X Dual Triode
RK20A	7.5	5130-0240	0	---	X2	S5	625	CAP= P
22	3.0	4100-2300	0	---	X1	S5	300	CAP= G
24A	2.5	5100-2340	25	---	X2	S5	300	CAP= G
VT25A	7.5	4130-2000	44	---	X2	S5	375	
25A7	25.0	7250-3486	32	---	X2	S5	550	Pent. Sect.
25A7	25.0	7200-6013	0	40	SH	S3	650	Rect. Sect.

## Supplementary Tube Test Data for Obsolete Tube Types

TUBE TYPE	FIL	SELECTORS	BIAS	SHUNT	MULT.	PRESS	MIN. MUT. COND.	NOTATIONS
25AC5	25.0	7250-3080	0	---	X2	S5	475	
25B5	25.0	6140-2350	0	---	X2	S5	625	
25B6	25.0	7250-3480	20	---	X10	S4	300	
25B8	25.0	7200-3410	18	---	X4	S5	275	Pent. Sect. CAP= G
25B8	25.0	7280-5060	7	---	X4	S5	300	Triode Sect.
25D8	25.0	7200-3410	18	---	X4	S5	300	Pent. Sect. CAP= G
25D8	25.0	7250-6010	12	---	X4	S5	175	Triode Sect.
25D8	25.0	7200-8010	12	53	SH	S1	400	Diode Sect.
25N6	25.0	7250-3480	0	---	X2	S5	625	
25T	6.3	4130-0000	0	---	X2	S5	275	CAP= P
25Y5	25.0	6100-5243	0	30	SH	S3	650	X Dual Diode
25Z3	25.0	6100-5243	0	30	SH	S3	650	X Dual Diode
25Z4	25.0	7200-5080	0	50	SH	S3	650	
25Z5	25.0	6100-5243	0	30	SH	S3	650	X Dual Diode
26	1.4	4130-2000	39	---	X2	S5	350	
27	2.5	5130-2040	41	---	X2	S5	300	
30	2.0	4130-2000	43	---	X2	S5	275	
31	2.0	4130-2000	41	---	X2	S5	275	
32L7	35.0	7250-3480	16	---	X10	S4	300	Pent. Sect.
32L7	35.0	7200-6013	0	45	SH	S3	650	Rect. Sect.
33	2.0	5130-2400	27	---	X2	S5	400	
RK33	6.3	7104-3526	35	---	X2	S5	425	X Dual Triode. CAP= G
34	2.0	4100-2300	16	---	X2	---	175	CAP= G. Hold down S1 and Press S5
35	2.5	5100-2340	20	---	X2	S5	300	CAP= G
35A5	35.0	8160-2370	0	---	X10	S4	300	
35Z4	35.0	7200-5080	0	50	SH	S3	650	
35Z6	35.0	7200-5384	0	50	SH	S3	650	X Dual Diode
36	6.3	5100-2340	31	---	X2	S5	325	CAP= G
37	6.3	5130-2040	42	---	X2	S5	275	
38	6.3	5100-2340	35	---	X2	S5	325	CAP= G
39/44	6.3	5100-2340	25	---	X2	S5	300	CAP= G
40	5.0	4130-2000	20	---	X1	S5	125	
40Z5	50.0	7200-5080	0	53	SH	S3	650	
41	6.3	6140-2350	17	---	X4	S5	375	
42	6.3	6140-2350	23	---	X2	S5	625	
43	25.0	6140-2350	18	---	X4	S5	350	
45Z3	50.0	7100-2040	0	44	SH	S3	650	
45Z5	50.0	7200-5080	0	53	SH	S3	650	
46	2.5	5130-2400	0	---	X2	S5	625	
47	2.5	5130-2400	0	---	X2	S5	625	
48	25.0	6140-2350	45	---	X2	S5	625	
49	2.0	5130-2400	49	---	X2	S5	350	
50	7.5	4130-2000	60	---	X2	S5	475	
50Y6	50.0	7200-5384	0	45	SH	S3	650	X Dual Diode
50Z7	50.0	7200-5384	0	45	SH	S3	650	X Dual Diode
51/51S	2.5	5100-2340	20	---	X2	S5	325	CAP= G
HD51	OFF	0000-5020	---	---	VR	S9	150 V.	( 155V. Regulation = 2 Volts ( from 5 to 30 MA
57A	6.3	6100-2354	21	---	X2	S5	375	CAP= G
58A/58AS	6.3	6100-2354	17	---	X2	S5	500	CAP= G
VT67	2.0	4130-2000	43	---	X2	S5	275	
HY65	6.3	7250-0408	0	---	X4	S5	425	CAP= P
HY69	6.3	5130-0240	0	---	X4	S5	475	CAP= P
70A7	75.0	7250-3480	80	---	X4	S5	475	Pent. Sect.
70A7	75.0	7200-1000	0	58	SH	---	650	Rect. Sect. Reverse Meter Hold down S7 and Press S3
71A	5.0	4130-2000	69	---	X2	S5	525	
79	6.3	6103-5240	13	---	X2	S5	300	X Dual Triode. CAP= G
81	7.5	4100-2000	0	0	SH	S3	400	
82	2.5	4100-3200	0	55	SH	S3	650	X Dual Diode
85	6.3	6100-2050	42	---	X2	S5	300	Triode Sect. CAP= G
85	6.3	6100-4352	42	30	SH	S1	400	X Dual Diode

## Supplementary Tube Test Data for Obsolete Tube Types

TUBE TYPE	FIL.	SELECTORS	BIAS	SHUNT	MULT.	PRESS	MIN. MUT. COND.	NOTATIONS
85AS	6.3	6100-2050	26	---	X2	S5	375	Triode Sect. CAP= G X Dual Diode
85AS	6.3	6100-4352	26	30	SH	S1	400	
99	3.0	4130-2000	20	---	X1	S5	250	Pent. Sect. Rect. Sect. Right CAP= P. Left CAP= G
112A	5.0	4130-2000	48	---	X2	S5	525	
CK113	50.0	7250-3486	32	---	X2	S5	550	
CK113	50.0	7200-6013	0	40	SH	S3	650	
HY114	1.4	7200-0000	22	---	X2	S5	350	
117Z4	117.0	7200-5080	0	50	SH	S3	650	CAP= G CAP= G
183	5.0	4130-2000	79	---	X2	S5	475	
244A	2.0	5130-2040	42	---	X2	S5	150	
257A	3.0	4100-2000	16	---	X1	S5	300	
259A	2.0	5100-2340	19	---	X2	S5	250	
264C	1.4	4130-2000	20	---	X1	S5	300	CAP= G CAP= G
271A	5.0	5130-2040	32	---	X4	S5	400	
283A	2.0	5100-2340	28	---	X2	S5	300	
285A	2.0	5100-2340	31	---	X2	S5	300	
310A	10.0	6100-2354	20	---	X2	S5	475	
311A	10.0	5100-2340	31	---	X2	S5	700	CAP= G CAP= G
482A	5.0	4130-2000	79	---	X2	S5	475	
482B	5.0	4130-2000	58	---	X2	S5	475	
483	5.0	4130-2000	79	---	X2	S5	475	
485	3.0	5130-2040	37	---	X2	S5	400	
CK505AX	0.6	3540-1200	17	---	X1	S5	100	Sect. No. 1 Sect. No. 2
CK510AX	0.6	4710-2306	0	0	SH	S6	50	
CK510AX	0.6	4760-5301	0	0	SH	S6	50	
CK556AX	1.1	4230-1000	26	---	X2	S5	500	
CK568AX	1.1	4230-1000	38	---	X2	S5	200	
CK569AX	1.1	3540-1200	8	---	X1	S5	525	CAP= P. Fuse lamp will glow brightly.
CK571AX	1.1	3470-1200	57	---	X1	S5	100	
CK573AX	1.1	2430-1000	34	---	X2	S5	625	
CK574AX	0.6	3540-1200	15	---	X1	S5	100	
CK605CX	6.3	3470-1265	10	---	X4	S5	675	
CK606BX	6.3	2300-1040	0	80	SH	S1	400	TOP LEAD = P Near CAP= G; Far CAP= P
CK608CX	6.3	3450-1060	22	---	X10	S5	300	
CK619CX	6.3	2340-1050	7	---	X10	S5	250	
717A	6.3	7240-8631	8	---	X4	S5	475	
814	10.0	5130-0240	0	---	X2	S5	750	
SD828A	6.3	4630-1520	22	---	X4	S5	300	Top Lead = P
SD828E	6.3	4630-0512	12	---	X10	S5	325	
834	7.5	4100-0000	0	---	X2	S5	525	
SD917A	6.3	3420-1050	10	---	X4	S4	425	
SN944	6.3	4630-0512	12	---	X4	S5	375	
SN946B	6.3	2300-1040	0	80	SH	S1	400	Strikes at about 78
SN947D	6.3	3610-5780	44	---	X10	S5	300	
SN949C	6.3	3670-1052	#	50	SH	S3	650	
SN953D	6.3	3610-5720	15	---	X10	S5	350	
SN954	6.3	4200-1030	0	0	SH	S3	650	
SN954B	6.3	3600-2050	0	0	SH	S3	650	Top Lead = P. Connect Fil. leads to Pins 1 and 2
SN956B	1.1	1200-0000	0	---	X1	S3	400	
SN957A	6.3	5340-1020	25	---	X4	S5	425	
SN972D	6.3	3610-5740	13	---	X4	S5	475	
SN973B	6.3	3610-5740	16	---	X4	S5	475	
SN976C	6.3	3610-5780	44	---	X10	S5	300	Grid No. 1 Grid No. 2 Plate No. 1 Plate No. 2
SD993C	6.3	3610-8050	19	---	X10	S5	300	
SD995B	6.3	3610-5740	13	---	X4	S5	475	
FM1000	6.3	8120-4536	0	---	X2	S5	225	
FM1000	6.3	8160-4532	0	---	X2	S5	275	
1005	6.3	6800-3050	0	93	SH	S6	650	Grid No. 1 Grid No. 2 Plate No. 1 Plate No. 2
1005	6.3	6800-5030	0	93	SH	S6	650	
SN1006	6.3	5340-1200	9	---	X4	S4	225	



MODEL 752A

Supplementary Tube Test Data for Obsolete Tube Types

TUBE TYPE	FIL	SELECTORS	BIAS	SHUNT	MULT.	PRESS	MIN. MUT. COND.	NOTATIONS
CK1027	OFF	0000-4070	0	91	SH	S6	650	CAP= P
E1148	6.3	7200-0080	12	---	X4	S5	350	Upper CAP= P Lower CAP= G
1247	0.6	4500-0000	0	0	SH	S1	400	Top Lead = P
HY1269	12.6	5130-0240	0	---	X10	S5	275	CAP= P. Short on 1-2
1291	2.5	1860-7000	27	---	X2	S5	475	Triode No. 1
1291	2.5	8130-2000	27	---	X2	S5	475	Triode No. 2
1602	7.5	4130-2000	44	---	X2	S5	375	
1616	4.3	4100-0000	0	30	SH	S2	650	CAP= P
1625	12.6	7140-0360	28	---	X4	S5	600	CAP= P
1626	12.6	7250-3080	46	---	X2	S5	650	
1629	12.6	7250-4080	0	100	SH	S5	---	Eye Open
1629	12.6	7250-4380	0	100	SH	S5	---	Eye Closed
1641	5.0	4100-0000	0	28	SH	S3	650	Left CAP= P
1641	5.0	1400-0000	0	28	SH	S3	650	Right CAP= P
1650	6.3	6140-3070	24	---	X2	S5	600	
1654	1.4	1700-0000	0	67	SH	S6	650	CAP= P
5517	OFF	0000-4070	0	40	SH	S2	650	CAP= P
5591	6.3	4310-5620	10	---	X4	S5	675	
5603	6.3	2740-8623	42	---	X4	S5	625	
5608A	2.5	7153-6240	17	---	X2	S5	475	X Dual Triode
5823	OFF	0000-1030	0	91	SH	S6	650	Place a 1 megohm 1/2 watt resistor across pins 1 and 4 in Loctal socket
5901	6.3	3610-5740	16	---	X4	S5	475	
7193	6.3	7200-0080	23	---	X4	S5	475	Far Cap = G Near Cap = P
8005	10.0	4130-0000	0	---	X4	S5	400	CAP= P
38142	7.5	4130-2000	37	---	X2	S5	625	
XXB	2.5	1850-6000	10	---	X2	S4	350	Triode No. 1
XXB	2.5	8140-3000	10	---	X2	S4	350	Triode No. 2
XXD	12.6	8154-6372	27	---	X4	S5	325	X Dual Triode
XXFM	6.3	8130-2040	11	---	X4	S5	150	Triode Sect.
XXFM	6.3	8100-5647	0	77	SH	S1	400	X Dual Diode
XXL	6.3	8160-2070	23	---	X4	S5	400	



# ADAPTERS

for

## TUBE TESTERS

As new tube types with new basing arrangements are developed, Hickok makes Adapters to accommodate them. These Adapters consist of the new bases which plug into a socket on your Tube Tester and thus enlarge its scope to the extent of the new basings. This Hickok policy greatly extends the useful life of your Tester. Consult the following list of Adapters with

their descriptions to determine which Adapter meets your requirements. Please order by both Model and Code number of the Adapter, as well as indicating the Model and Serial number of the Tube Tester with which the Adapter is to be used.

Model No.	Code No.	
CA-5	1050-164	Adapter - Latest Tube Bases: This adapter provides tube test sockets for Compactrons, Novars, 5 and 7-pin Nuvisitors and the new 10-pin tubes, including Decals. Three selector switches provide selection of tube elements on the latest based tubes and a permanently attached lead provides for top cap tube connections. The adapter is supplied with a connecting cable terminating in a Noval plug which is plugged into the tube tester Noval test socket.
SA-1	1050-94	Subminiature Adapter, with sockets for testing 7-pin inline and 8-pin round tube types on some early units of Models 539B, 539C, 580, 750, 752, 752A, 6000, 6000A and 6005 Tube Testers that were not supplied with these sockets on their panels, although most of the above Testers are equipped with these sockets. Check your particular Tester before ordering.
SA-2	1050-99	Subminiature Adapter, with sockets for testing 7-pin inline and 8-pin round tube types on some early units of Models 533A, 600A, 800, 800A and 1575 Tube Testers that were not supplied with these sockets on their panels, although most of the above Testers are equipped with these sockets. Check your particular Tester before ordering.
SA-3	1050-127	Nuvisor Adapter, for testing 5-pin Nuvisor tube types on all Hickok Tube Testers not supplied with this socket on the panel. NOTE: This socket is also on the CA-4, 1050-135 (and CA-5, 1050-164) Universal Adapters. If you have a Universal Adapter, this Nuvisor Adapter is unnecessary.
SA-4	1050-144	Novar Adapter, for testing all Novar tube types on all Hickok Tube Testers not supplied with this socket on the panel. NOTE: This socket is also on the CA-4, 1050-135 (and CA-5, 1050-164) Universal Adapters. If you have a Universal Adapter, this Novar Adapter is unnecessary.
SA-5	1050-129	Rimlock Adapter, for testing Foreign Rimlock tube types on all Hickok Tube Testers.
SA-6	1050-107	Septar Adapter, for testing Septar tube types such as 829B, 832A, etc., on all Hickok Tube Testers.
SA-7	1050-9	Acorn Adapter, for testing Acorn tube types on all Hickok Tube Testers not supplied with this socket on the panel.
SA-8	1050-168	Magnoval Adapter, for testing Magnoval tube types on all Hickok Tube Testers not supplied with this socket. CAUTION: Any attempt to force a Magnoval tube type into a Novar socket (it can be done) will spread the pin contacts in the socket and render it permanently useless for testing Novar tube types.
SA-9	1050-121	Pencil Tube Adapter, for testing Pencil tube types on all Hickok Tube Testers.
SA-11	1050-177	Decal Adapter, for testing 10-pin Decal tube types on all Hickok Tube Testers not supplied with this socket on panel. The following list of early Hickok Tube Testers also require a CA-4, 1050-135, Universal Adapter be used in conjunction with this Adapter: Models 533A, 539B, 600A, 605A, 750, 752, 800, 1575, 6000 and 6005.





## ADAPTERS

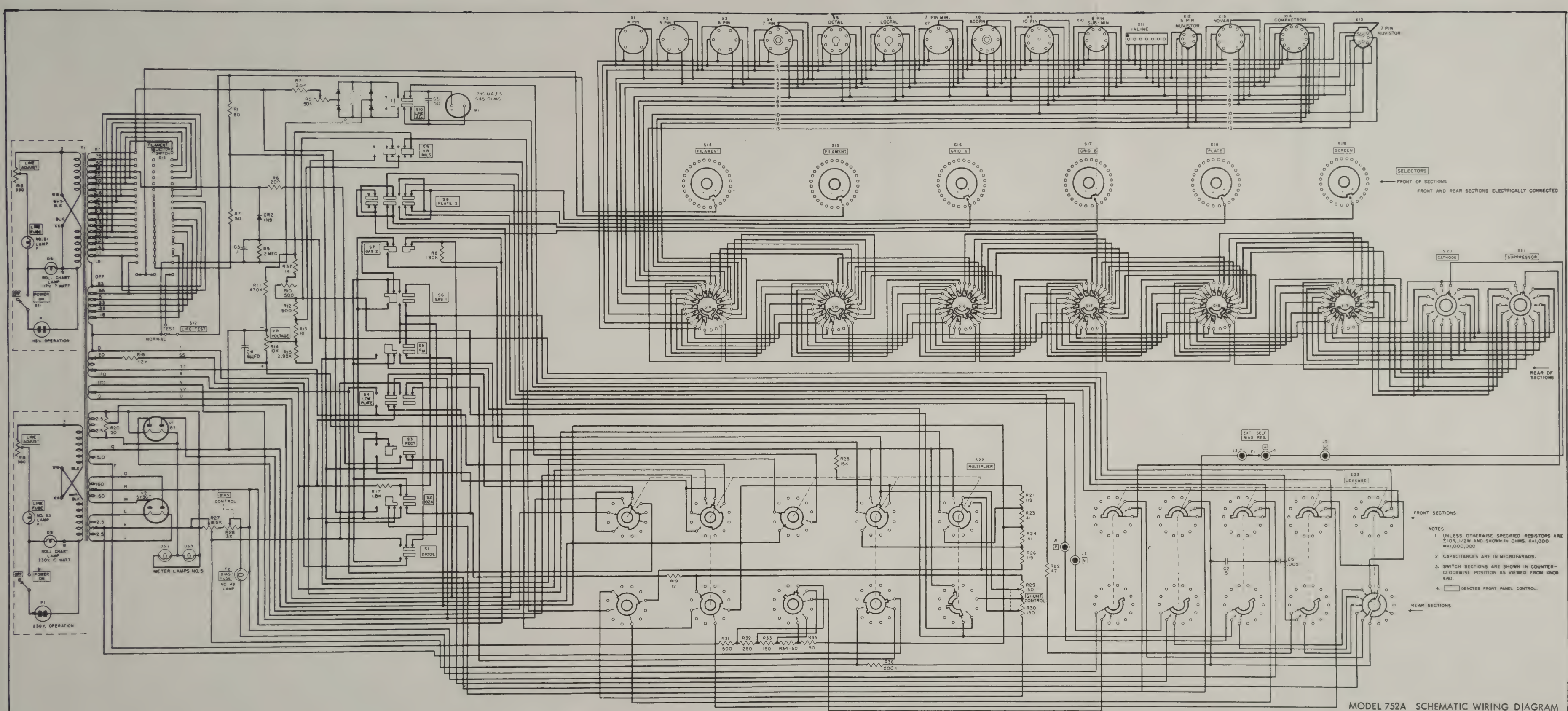
### for TUBE TESTERS

As new tube types with new basing arrangements are developed, Hickok makes Adapters to accommodate them. These Adapters consist of the new bases which plug into a socket on your Tube Tester and thus enlarge its scope to the extent of the new basings. This Hickok policy greatly extends the useful life of your Tester. Consult the following list of Adapters with

their descriptions to determine which Adapter meets your requirements. Please order by both Model and Code number of the Adapter, as well as indicating the Model and Serial number of the Tube Tester with which the Adapter is to be used.

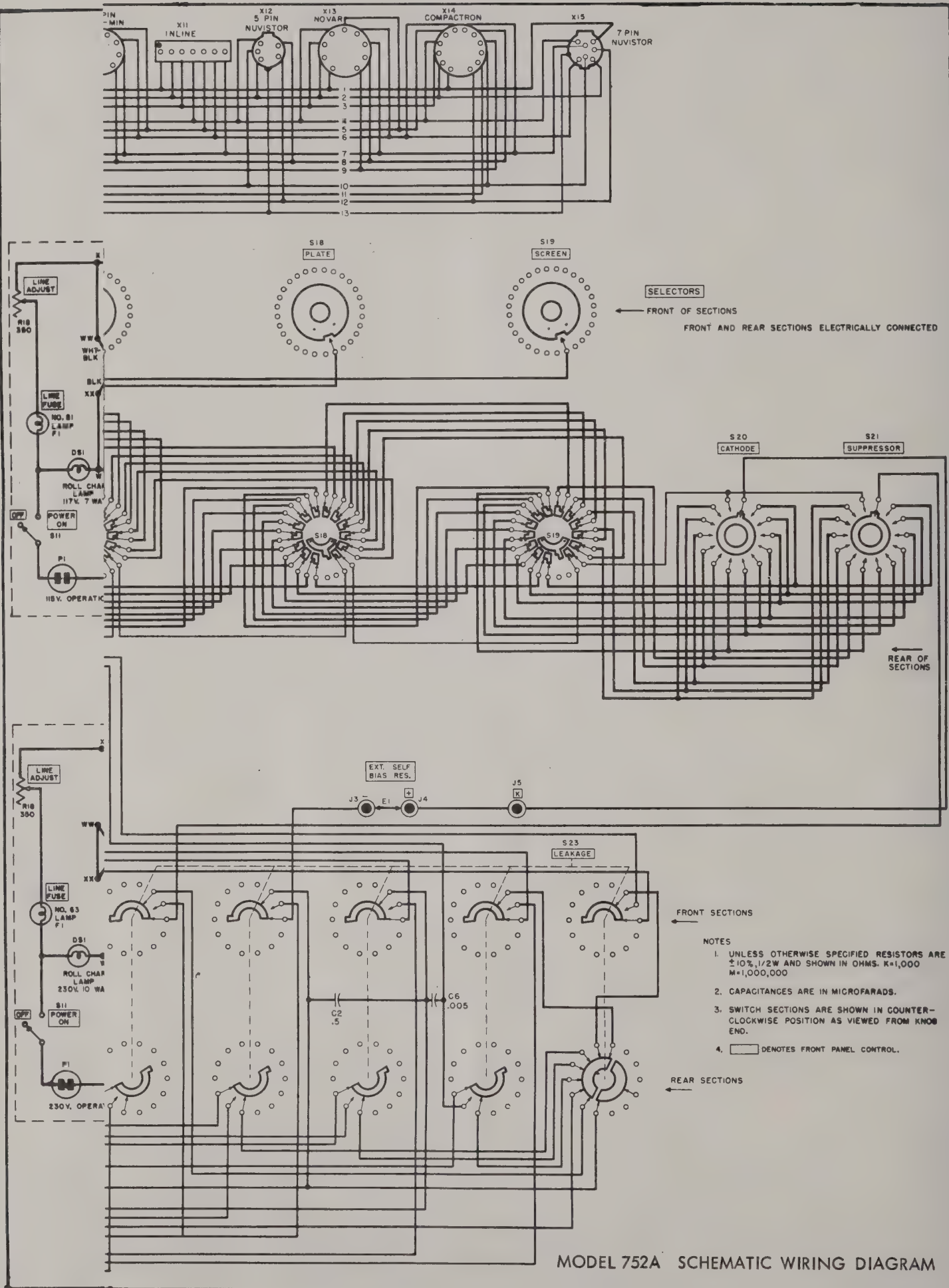
Model No.	Code No.	
CA-5	1050-164	Adapter - Latest Tube Bases: This adapter provides tube test sockets for Compactrons, Novars, 5 and 7-pin Nuvistors and the new 10-pin tubes, including Decals. Three selector switches provide selection of tube elements on the latest based tubes and a permanently attached lead provides for top cap tube connections. The adapter is supplied with a connecting cable terminating in a Noval plug which is plugged into the tube tester Noval test socket.
SA-1	1050-94	Subminiature Adapter, with sockets for testing 7-pin inline and 8-pin round tube types on some early units of Models 539B, 539C, 580, 750, 752, 752A, 6000, 6000A and 6005 Tube Testers that were not supplied with these sockets on their panels, although most of the above Testers are equipped with these sockets. Check your particular Tester before ordering.
SA-2	1050-99	Subminiature Adapter, with sockets for testing 7-pin inline and 8-pin round tube types on some early units of Models 533A, 600A, 800, 800A and 1575 Tube Testers that were not supplied with these sockets on their panels, although most of the above Testers are equipped with these sockets. Check your particular Tester before ordering.
SA-3	1050-127	Nuvistor Adapter, for testing 5-pin Nuvistor tube types on all Hickok Tube Testers not supplied with this socket on the panel. NOTE: This socket is also on the CA-4, 1050-135 (and CA-5, 1050-164) Universal Adapters. If you have a Universal Adapter, this Nuvistor Adapter is unnecessary.
SA-4	1050-144	Novar Adapter, for testing all Novar tube types on all Hickok Tube Testers not supplied with this socket on the panel. NOTE: This socket is also on the CA-4, 1050-135 (and CA-5, 1050-164) Universal Adapters. If you have a Universal Adapter, this Novar Adapter is unnecessary.
SA-5	1050-129	Rimlock Adapter, for testing Foreign Rimlock tube types on all Hickok Tube Testers.
SA-6	1050-107	Septar Adapter, for testing Septar tube types such as 829B, 832A, etc., on all Hickok Tube Testers.
SA-7	1050-9	Acorn Adapter, for testing Acorn tube types on all Hickok Tube Testers not supplied with this socket on the panel.
SA-8	1050-168	Magnoval Adapter, for testing Magnoval tube types on all Hickok Tube Testers not supplied with this socket. CAUTION: Any attempt to force a Magnoval tube type into a Novar socket (it can be done) will spread the pin contacts in the socket and render it permanently useless for testing Novar tube types.
SA-9	1050-121	Pencil Tube Adapter, for testing Pencil tube types on all Hickok Tube Testers.
SA-11	1050-177	Decal Adapter, for testing 10-pin Decal tube types on all Hickok Tube Testers not supplied with this socket on panel. The following list of early Hickok Tube Testers also require a CA-4, 1050-135, Universal Adapter be used in conjunction with this Adapter: Models 533A, 539B, 600A, 605A, 750, 752, 800, 1575, 6000 and 6005.





MODEL 752A SCHEMATIC WIRING DIAGRAM











TUBE TYPE	FIL.	SELECTORS	BIAS	SHUNT	MULT.	PRESS	MIN.		NOTATIONS
							MUT.	COND.	
3GY5†	3.0	1C50-07A0	32	---	X10	--		675	CAP=P HOLD DOWN S1 AND PRESS S5.
4FS7	4.3	4520-8930	10	---	X10	S5		500	PENT. SECT.
4FS7	4.3	4560-7030	33	---	X10	S5		350	TRIODE SECT.
5AF11†	5.0	1CB0-2A90	12	---	X10	S5		450	PENT. SECT.
5AF11	5.0	1C60-8050	14	---	X4	S5		700	TRIODE NO. 1
5AF11	5.0	1C30-4070	11	---	X4	S5		500	TRIODE NO. 2
5MF8†	5.0	1C70-4890	34	---	X4	S5		750	PENT. SECT.
5MF8	5.0	1CA0-20B0	21	---	X4	S5		750	TRIODE SECT.
6LZ6†	6.3	4520-0738	73	---	X4	S5		650	CAP=P
6MJ6I	6.3	4520-0738	65	---	X4	S5		450	CAP=P
9AM10†	10.0	1C90-A040	17	---	X4	S5		725	TRIODE NO. 1
9AM10	10.0	1C70-5060	17	---	X4	S5		725	TRIODE NO. 2
9AM10	10.0	1CB0-2030	17	---	X4	S5		725	TRIODE NO. 3
10AF11†	10.0	1CB0-2A90	12	---	X10	S5		450	PENT. SECT.
10AF11	10.0	1C60-8050	14	---	X4	S5		700	TRIODE NO. 1
10AF11	10.0	1C30-4070	11	---	X4	S5		500	TRIODE NO. 2
11BN11†	10.0	1C70-B98A	10	---	X10	S5		475	PENT. NO. 1
11BN11	10.0	1C30-5426	10	---	X10	S5		475	PENT. NO. 2
12BA11†	12.6	1C40-6387	10	---	X1	S5		325	PENT. NO. 1
12BA11	12.6	1C40-2385	10	---	X1	S5		325	PENT. NO. 2



## NOTATIONS

- NOTE 1: symbol "X" For dual triodes make normal leakage test first, then repeat leakage test for 2nd section with button S8 pressed down and held. Proceed with 1st section Gm test with S8 released. For 2nd section test on all dual tubes, press down and hold button S8 together with button listed in PRESS column.
- NOTE 2: symbol "+ " Verify shorts by setting filament switch to OFF position.
- NOTE 3: symbol "★ " Approximate starting voltage for voltage regulator tubes.
- NOTE 4: symbol "† " Read 0-100 milliamperes with button S9 pressed down.
- NOTE 5: symbol "VR" For voltage regulator tubes, the figure in the MIN MUT COND (minimum mutual conductance) column indicates the nominal operating voltage.
- NOTE 6: symbol "# " Set BIAS at 100, press and hold down button indicated in the PRESS column while rotating BIAS dial counterclockwise until tube strikes.
- NOTE 7: For TUBE TESTER Models 752 and 752A, the Universal Adapter CA-5, 1050-164, is available. This Adapter provides tube test sockets for Compactrons, Novars, 5 and 7-pin Nuvistors, and the new 10-pin tubes, including Decals. Test data for these tubes is supplied in supplementary form with the Adapter. See inside back cover for description of all adapters.



TUBE TYPE	FIL.	SELECTORS	BIAS	SHUNT	MULT	PRESS	MIN. MUT. COND	NOTATIONS
0A4	OFF	0000-5720	100	91	SH	S6	650	
0Y4	OFF	7830-5010	0	45	SH	S2	650	
1A4	2.0	4100-2300	18	---	X2	--	225	CAP = G. HOLD DOWN S1 AND PRESS S5.
1A5	1.4	7250-3400	18	---	X2	--	250	HOLD DOWN S1 AND PRESS S5.
1A6	2.0	6100-2504	12	---	X2	--	225	PENTODE SECTION. CAP = G. HOLD DOWN S1 AND PRESS S5.
1A6	2.0	6140-3502	25	---	X1	S5	125	OSC. SECTION.
1A7	1.4	7250-3400	0	---	X2	--	275	PENTODE SECTION. CAP = G. HOLD DOWN S1 AND PRESS S5. OSC. SECTION.
1A7	1.4	7250-6430	24	---	X1	S5	250	
1AB5	1.1	8160-2300	0	---	X2	S5	375	
1AC5	1.1	4520-7800	16	---	X1	S5	360	
1AD5	1.1	4520-7800	0	---	X1	S5	425	
1AE4	1.1	1760-2300	14	---	X4	S5	225	
1AF4	1.4	1760-2300	17	---	X4	S5	150	
1AF5	1.4	1760-5400	9	---	X1	S5	375	PENTODE SECTION.
1AF5	1.4	1700-3000	0	0	SH	S1	250	DIODE SECTION.
1AG5	1.1	4650-1200	23	---	X1	S5	225	PENTODE SECTION.
1AG5	1.1	4600-3000	0	0	SH	S1	150	DIODE SECTION.
1AJ5	1.1	4650-1203	22	---	X1	S5	250	PENTODE SECTION.
1AJ5	1.1	4600-3000	0	40	SH	S1	400	DIODE SECTION.
1AK5	1.1	4650-1203	22	---	X1	S5	175	PENTODE SECTION.
1AK5	1.1	4600-3000	0	20	SH	S1	400	DIODE SECTION.
1AU3	1.1	7200-0000	0	53	SH	S6	400	CAP = P.
1AX2	1.4	1200-0000	0	57	SH	S6	400	CAP = P.
1B4	2.0	4100-2300	15	---	X1	S5	400	CAP = G.
1B5	2.0	6150-2000	10	---	X1	S5	350	TRIODE SECTION.
1B5	2.0	6100-4300	0	40	SH	S1	400	DUAL DIODE. NOTE 1.
1B7	1.4	7200-3405	4	---	X2	--	300	PENTODE SECTION. CAP = G. HOLD DOWN S1 AND PRESS S5.
1B7	1.4	7250-6403	17	---	X2	--	200	OSC. SECTION. HOLD DOWN S1 AND PRESS S5.
1C3	1.4	1740-2000	19	---	X1	S5	475	
1C5	1.4	7250-3400	18	---	X2	--	475	HOLD DOWN S1 AND PRESS S5.
1C6	2.0	6100-2534	13	---	X2	--	250	AMPL. SECTION. CAP = G. HOLD DOWN S1 AND PRESS S5.
1C6	2.0	6140-3520	28	---	X1	S5	150	OSC. SECTION.
1C7	2.0	7200-3465	13	---	X2	--	250	PENTODE SECTION. CAP = G. HOLD DOWN S1 AND PRESS S5.
1C7	2.0	7250-6430	28	---	X1	S5	150	OSC. SECTION.
1C8	1.1	4520-7608	40	---	X1	S5	175	
1D5	2.0	7200-3400	18	---	X2	--	225	CAP = G. HOLD DOWN S1 AND PRESS S5.
1D7	2.0	7200-3465	12	---	X2	--	225	PENTODE SECTION. CAP = G. HOLD DOWN S1 AND PRESS S5.
1D7	2.0	7250-6430	25	---	X1	S5	125	OSC. SECTION.
1D8	1.4	7250-3460	18	---	X2	--	275	PENTODE SECTION. HOLD DOWN S1 & PRESS S5
1D8	1.4	7200-6000	0	---	X1	S5	350	TRIODE SECTION. CAP = G.
1D8	1.4	7200-8000	0	0	SH	S1	400	DIODE SECTION.
1E3	1.1	4510-8000	20	---	X4	S5	550	
1E4	1.4	7250-3000	25	---	X2	S5	375	
1E5	2.0	7200-3400	15	---	X1	S5	400	CAP = G.
1E7	2.0	7250-6834	11	---	X2	S5	350	PENTODE NO. 1.
1E7	2.0	7240-3865	11	---	X2	S5	350	PENTODE NO. 2.
1F4	2.0	5130-2400	22	---	X2	S5	425	
1F5	2.0	7250-3400	22	---	X2	S5	425	
1F6	2.0	6100-2300	8	---	X2	--	200	PENTODE SECTION. CAP = G. HOLD DOWN S1 AND PRESS S5.
1F6	2.0	6100-5400	8	0	SH	S1	400	DUAL DIODE. NOTE 1.
1F7	2.0	7200-3600	8	---	X2	--	200	PENTODE SECTION. CAP = G. HOLD DOWN S1 AND PRESS S5.
1F7	2.0	7200-4530	8	0	SH	S1	400	DUAL DIODE. NOTE 1.
1G4	1.4	7250-3000	48	---	X2	S5	250	
1G5	2.0	7250-3040	16	---	X2	--	475	HOLD DOWN S1 AND PRESS S5.
1G6	1.4	7254-6300	19	---	X2	S5	200	DUAL TRIODE. NOTE 1.
1H4	2.0	7250-3000	40	---	X2	S5	275	

TUBE TYPE	FIL.	SELECTORS	BIAS	SHUNT	MULT	PRESS	MIN. MUT. COND	NOTATIONS
1H5	1.4	7200-3000	0	---	X1	S5	175	TRIODE SECTION. CAP = G.
1H5	1.4	7200-5000	0	0	SH	S1	400	DIODE SECTION.
1H6	2.0	7260-3000	10	---	X1	S5	350	TRIODE SECTION.
1H6	2.0	7200-5400	0	40	SH	S1	400	DUAL DIODE. NOTE 1.
1J3	1.1	7200-0000	0	53	SH	S5	400	CAP = P.
1J5	2.0	7250-3400	46	---	X2	S5	300	
1J6	2.0	7254-6300	23	---	X2	S5	300	DUAL TRIODE. NOTE 1.
1L4	1.4	7160-2300	19	---	X2	S5	325	
1L6	1.4	1760-2534	0	---	X1	S5	625	PENTODE SECTION. NOTE 2.
1L6	1.4	1740-3526	0	---	X1	S5	250	OSC. SECTION. NOTE 2.
1LA4	1.4	8160-2300	18	---	X2	--	250	HOLD DOWN S1 AND PRESS S5.
1LA6	1.4	8160-2534	8	---	X1	S5	625	PENTODE SECTION. NOTE 2.
1LA6	1.4	8140-3526	0	---	X1	S5	225	OSC. SECTION. NOTE 2.
1LB4	1.4	8160-2300	18	---	X2	--	275	HOLD DOWN S1 AND PRESS S5.
1LB6	1.4	8160-2437	---	---	---	--	----	USE THIS SETTING FOR SHORT CHECK ONLY.
1LB6	1.4	8160-3574	22	---	X1	S5	300	
1LC5	1.4	8160-2340	13	---	X1	S5	475	NOTE 2.
1LC6	1.4	8160-2534	8	---	X1	S5	625	PENTODE SECTION. NOTE 2.
1LC6	1.4	8140-3526	19	---	X1	S5	225	OSC. SECTION. NOTE 2.
1LD5	1.4	8160-2300	14	---	X1	S5	350	PENTODE SECTION.
1LD5	1.4	8100-4000	0	0	SH	S1	400	DIODE SECTION.
1LE3	1.4	8160-2000	25	---	X2	S5	375	
1LF3	1.4	8160-2000	25	---	X2	S5	375	
1LG5	1.4	8160-2340	15	---	X2	S5	325	NOTE 2.
1LH4	1.4	8160-2000	0	---	X1	S5	175	TRIODE SECTION.
1LH4	1.4	8100-4000	0	0	SH	S1	400	DIODE SECTION.
1LN5	1.4	8160-2340	11	---	X2	S5	225	NOTE 2.
1N5	1.4	7200-3400	11	---	X2	S5	225	CAP = G.
1N6	1.4	7250-3400	40	---	X2	S5	250	PENTODE SECTION.
1N6	1.4	7200-6000	0	0	SH	S1	400	DIODE SECTION.
1P5	1.4	7200-3400	12	---	X2	S5	250	CAP = G.
1Q5	1.4	7250-3400	0	---	X2	--	625	HOLD DOWN S1 AND PRESS S5.
1Q6	1.1	4520-7800	14	---	X1	S5	250	PENTODE SECTION.
1Q6	1.1	4500-6000	0	0	SH	S1	400	DIODE SECTION.
1R4	1.4	8100-4070	0	48	SH	S1	400	
1S6	1.1	4530-1800	14	---	X1	S5	250	PENTODE SECTION.
1S6	1.1	4500-6000	0	0	SH	S1	400	DIODE SECTION.
1SA6	1.4	7240-8630	0	---	X2	--	250	HOLD DOWN S1 AND PRESS S5.
1SB6	1.4	7280-3400	12	---	X1	S5	400	PENTODE SECTION.
1SB6	1.4	7280-5000	0	0	SH	S1	400	DIODE SECTION.
1T4	1.4	1760-2300	0	---	X2	S4	225	
1T5	1.4	7250-3400	44	---	X2	S5	350	
1T6	1.1	4530-1860	14	---	X1	S5	250	PENTODE SECTION. NOTE 2.
1T6	1.1	4500-6000	0	0	SH	S1	400	DIODE SECTION.
1U5	1.4	1760-2300	13	---	X1	S5	400	PENTODE SECTION.
1U5	1.4	1700-4000	0	15	SH	S1	400	DIODE SECTION.
1U6	1.4	1760-2534	10	---	X1	S5	625	AMPL. SECTION. NOTE 2.
1U6	1.4	1740-3562	0	---	X1	S5	225	OSC. SECTION. NOTE 2.
1V	6.3	4100-2030	0	40	SH	S3	650	
1V5	1.1	4520-7800	16	---	X1	S5	360	
1V6	1.1	4730-1205	12	---	X1	S5	300	PENTODE SECTION. NOTE 2.
1V6	1.1	4750-6003	27	---	X1	S5	175	TRIODE SECTION. NOTE 2.
1W4	1.4	1760-2300	16	---	X1	S5	575	
1Z2	1.4	1200-0000	0	80	SH	S6	400	CAP = P.
2A3	2.5	4130-2000	74	---	X4	S5	475	
2A4	2.5	7250-3000	---	93	SH	S6	650	STRIKES AT ABOUT 44. NOTE 6.
2A5	2.5	6140-2350	23	---	X2	S5	625	
2A6	2.5	6100-2050	11	---	X4	S5	175	TRIODE SECTION. CAP = G.
2A6	2.5	6100-4350	11	32	SH	S1	400	DUAL DIODE. NOTE 1.
2A7	2.5	7100-2365	0	---	X2	S4	300	PENTODE SECTION. CAP = G.
2A7	2.5	7150-4362	22	---	X1	S5	225	OSC. SECTION.
2B3	1.4	7200-0000	0	80	SH	S6	400	CAP = P.
2B4	2.5	5130-2040	---	93	SH	S6	650	STRIKES AT ABOUT 58. NOTE 6.

TUBE TYPE	FIL.	SELECTORS	BIAS	SHUNT	MULT	PRESS	MIN. MUT. COND	NOTATIONS
2B6	2.5	7140-2360	18	---	X2	S5	475	
2B7	2.5	7100-2360	22	---	X2	S5	300	PENTODE SECTION. CAP = G.
2B7	2.5	7100-5460	22	32	SH	S1	400	DUAL DIODE. NOTE 1.
2B22	6.3	7200-0080	0	30	SH	S3	650	TOP WASHER = P.
2B23	6.3	7200-3080	0	87	SH	S6	650	
2C4	2.5	7130-5040	---	93	SH	S6	650	STRIKES AT ABOUT 72. NOTE 6.
2C21	6.3	7104-3526	35	---	X2	S5	425	DUAL TRIODE. CAP = G. NOTE 1.
2C22	6.3	7200-0080	23	---	X4	S5	475	FAR CAP = G. NEAR CAP = P.
2C26	6.3	7200-0080	13	---	X2	S5	550	RIGHT CAP = P. LEFT CAP = G.
2C40	6.3	7200-0080	20	---	X4	S5	425	CAP = P. RING = G.
2C45	7.5	4130-2000	37	---	X2	S5	625	
2C50	12.6	7814-2536	41	---	X2	S5	550	DUAL TRIODE. NOTE 1.
2C52	12.6	7841-5263	15	---	X2	S5	300	DUAL TRIODE. NOTE 1.
2C53	6.3	7250-0080	0	---	X1	S5	175	CAP = P.
2D24	2.5	3420-1050	12	---	X10	S4	500	
2E5	2.5	6150-4030	0	100	SH	S5	----	EYE OPEN.
2E5	2.5	6150-4230	0	100	SH	S5	----	EYE CLOSED.
2E22	6.3	5130-0240	40	---	X2	S5	675	CAP = P. NOTE 2.
2E24	6.3	7250-0300	29	---	X4	S5	500	CAP = P.
2E25	6.3	7250-0408	0	---	X4	S5	425	CAP = P. NOTE 2.
2E26	6.3	7250-0318	37	---	X4	S5	550	CAP = P.
2E30	6.3	4310-5602	14	---	X4	S5	475	NOTE 2.
2E31	1.1	3540-1200	18	---	X1	S5	300	
2E32	1.1	3540-1200	18	---	X1	S5	300	
2E35	1.1	3540-1200	20	---	X1	S5	300	
2E36	1.1	3540-1200	20	---	X1	S5	300	
2E41	1.1	4650-1200	23	---	X1	S5	225	PENTODE SECTION.
2E41	1.1	4600-3000	0	0	SH	S1	150	DIODE SECTION.
2E42	1.1	4650-1200	23	---	X1	S5	225	PENTODE SECTION.
2E42	1.1	4600-3000	0	0	SH	S1	150	DIODE SECTION.
2G21	1.1	4730-2651	27	---	X1	S5	150	HEPTODE SECTION. NOTE 2.
2G21	1.1	4730-1000	25	---	X1	S5	250	TRIODE SECTION.
2G22	1.1	4730-2651	27	---	X1	S5	150	HEPTODE SECTION. NOTE 2.
2G22	1.1	4730-1000	25	---	X1	S5	250	TRIODE SECTION.
2V2	2.5	7200-0050	0	68	SH	S6	650	CAP = P. SHORT ON 1-2.
2V3	2.5	7200-0000	0	78	SH	S6	650	CAP = P.
2W3	2.5	8200-4000	0	0	SH	S3	400	
2X2A	2.5	4100-0000	0	88	SH	S6	650	CAP = P.
2Z2	2.5	4100-2000	0	0	SH	S3	400	
3A4	2.5	1740-2300	11	---	X2	--	600	HOLD DOWN S1 AND PRESS S5.
3A5	3.0	1750-6000	35	---	X2	S5	625	TRIODE NO. 1.
3A5	3.0	7130-2000	35	---	X2	S5	625	TRIODE NO. 2.
3A8	2.5	7200-3400	17	---	X2	S5	225	PENTODE SECTION. CAP = G.
3A8	2.5	7250-6000	0	---	X1	S5	175	TRIODE SECTION.
3A8	2.5	7200-8000	0	32	SH	S1	400	DIODE SECTION.
3B5	2.5	7250-3400	33	---	X2	S4	425	
3B7	2.5	1860-7000	27	---	X2	S5	475	TRIODE NO. 1.
3B7	2.5	8130-2000	27	---	X2	S5	475	TRIODE NO. 2.
3C2	3.0	7200-0000	0	88	SH	S6	400	CAP = P.
3C6	2.5	1850-6000	10	---	X2	S4	350	TRIODE NO. 1.
3C6	2.5	8140-3000	10	---	X2	S4	350	TRIODE NO. 2.
3CF6	3.0	4310-5627	10	---	X4	S5	700	
3D6	2.5	8160-2300	16	---	X4	--	375	HOLD DOWN S1 AND PRESS S5.
3E5	2.5	1760-2350	27	---	X1	S5	750	SHORT ON 1-2.
3E6	3.0	8160-2340	22	---	X4	S5	250	NOTE 2.
3E29	6.3	5762-0340	15	-	X10	S5	475	RIGHT CAP = P. USE ADAPT 1050-107
3E29	6.3	5126-0340	15	-	X10	S5	475	LEFT CAP = P.
3ES5	3.0	3420-5010	10	---	X10	S5	550	
3FQ5	3.0	4320-5070	14	---	X10	S5	650	
3FQ5A	3.0	4320-5070	14	---	X10	S5	750	
3GS8	3.0	4570-8219	0	---	X1	--	350	PENTODE NO. 1. HOLD DOWN S1 AND PRESS S5
3GS8	3.0	4570-3216	0	---	X1	--	350	PENTODE NO. 2. HOLD DOWN S1 AND PRESS S5



TUBE TYPE	FIL.	SELECTORS	HIAS	SHUNT	MULT	PRESS	MIN. MUT. COND	NOTATIONS
3GU5	3.0	4310-5620	9	---	X20	S5	650	
3HM6	3.0	4520-7819	10	---	X10	S5	625	
3HS8	3.0	4570-8219	10	---	X1	S5	325	PENTODE NO. 1.
3HS8	3.0	4570-3216	10	---	X1	S5	325	PENTODE NO. 2.
3HT6	3.0	4520-7819	10	---	X10	S5	475	
3LE4	2.5	8160-2300	55	---	X2	S5	350	
3LF4	2.5	8160-2300	0	---	X2	--	625	HOLD DOWN S1 AND PRESS S5.
3Q4	3.0	7130-2400	0	---	X4	--	300	HOLD DOWN S1 AND PRESS S5.
3Q5	2.5	7250-3400	0	---	X2	--	625	HOLD DOWN S1 AND PRESS S5.
3S4	2.5	7130-2400	23	---	X2	S4	475	
4-65A	7.5	1740-0600						CAP = P. USE ADAPT 1050-107. TEST FOR SHORTS ONLY
4A6	3.0	7250-6000	27	---	X2	S5	300	TRIODE NO. 1.
4A6	3.0	2740-3000	27	---	X2	S5	300	TRIODE NO. 2.
4BA6	4.3	4310-5672	0	---	X4	S5	500	
4BE6	4.3	4370-5621	0	---	X2	--	250	AMPL. SECTION. HOLD DOWN S1 AND PRESS S5
4BE6	4.3	4310-6027	20	---	X10	S5	400	OSC. SECTION.
4BX8	4.3	4572-6183	11	---	X10	S4	300	DUAL TRIODE. NOTE 1.
4BZ8	4.3	4572-6183	14	---	X10	S5	425	DUAL TRIODE. NOTE 1.
4CE5	4.3	4310-5620	10	---	X4	S5	700	
4CX250B	6.3	3750-0120						ANODE COOLER = P. USE ADAPT 1050-109. TEST FOR SHORTS ONLY
4GW5	4.3	4320-1050	19	---	X10	S5	300	
4X150A	6.3	3750-0120						ANODE COOLER = P. USE ADAPT 1050-109. TEST FOR SHORTS ONLY
4X250B	6.3	3750-0120						ANODE COOLER = P. USE ADAPT 1050-109. TEST FOR SHORTS ONLY
5A6	5.0	4570-1603	25	---	X4	S5	550	NOTE 2.
5AS4	5.0	8200-6000	0	35	SH	S3	650	PLATE NO. 1.
5AS4	5.0	8200-4000	0	30	SH	S3	650	PLATE NO. 2.
5AW4	6.3	8200-6004	0	36	SH	S3	650	PLATE NO. 1.
5AW4	6.3	8200-4006	0	31	SH	S3	650	PLATE NO. 2.
5AX4	5.0	8200-6000	0	36	SH	S3	400	PLATE NO. 1.
5AX4	5.0	8200-4000	0	27	SH	S3	400	PLATE NO. 2.
5AZ4	5.0	8200-6004	0	36	SH	S3	400	PLATE NO. 1.
5AZ4	5.0	8200-4006	0	27	SH	S3	400	PLATE NO. 2.
5BS8	5.0	4572-6183	16	---	X10	S5	450	DUAL TRIODE. NOTE 1.
5BZ7	5.0	4572-6183	17	---	X10	S5	425	DUAL TRIODE. NOTE 1.
5CM6	5.0	4530-9170	18	---	X4	S5	575	
5CR8	5.0	4520-6738	10	---	X4	S5	650	PENTODE SECTION.
5CR8	5.0	4590-1080	19	---	X4	S5	625	TRIODE SECTION.
5CU4	5.0	8200-6410	0	50	SH	S3	650	DUAL DIODE. NOTE 1.
5EH8	5.0	4570-9860	7	---	X4	S5	675	PENT. DE SECTION.
5EH8	5.0	4520-3010	15	---	X10	S5	475	TRIODE SECTION.
5T4	5.0	8200-6000	0	43	SH	S3	650	PLATE NO. 1.
5T4	5.0	8200-4000	0	34	SH	S3	650	PLATE NO. 2.
5W4	5.0	8200-6000	0	38	SH	S3	400	PLATE NO. 1.
5W4	5.0	8200-4000	0	32	SH	S3	400	PLATE NO. 2.
5X3	5.0	4100-3000	0	34	SH	S3	400	PLATE NO. 1.
5X3	5.0	4100-2000	0	20	SH	S3	400	PLATE NO. 2.
5X4	5.0	7800-5000	0	35	SH	S3	650	PLATE NO. 1.
5X4	5.0	7800-3000	0	30	SH	S3	650	PLATE NO. 2.
5Y4	5.0	7800-5000	0	36	SH	S3	400	PLATE NO. 1.
5Y4	5.0	7800-3000	0	27	SH	S3	400	PLATE NO. 2.
5Z3	5.0	4100-3000	0	35	SH	S3	650	PLATE NO. 1.
5Z3	5.0	4100-2000	0	30	SH	S3	650	PLATE NO. 2.
5Z4	5.0	8200-6400	0	57	SH	S3	650	DUAL DIODE. NOTE 1.
6A3	6.3	4130-2000	74	---	X4	S5	475	
6A4	6.3	5130-2400	28	---	X2	S5	625	
6A5	6.3	7250-3000	55	---	X4	S5	550	
6A6	6.3	7153-6240	17	---	X2	S5	475	DUAL TRIODE. NOTE 1.
6A7	6.3	7100-2365	0	---	X2	S4	300	PENTODE SECTION. CAP = G.
6A7	6.3	7150-4362	22	---	X1	S5	225	OSC. SECTION.

TUBE TYPE	FIL.	SELECTORS	BIAS	SHUNT	MULT	PRESS	MIN. MUT. CUND	NOTATIONS
6A8	6.3	7200-3485	0	---	X2	S4	300	PENTODE SECTION. CAP = G.
6A8	6.3	7250-6483	22	---	X1	S5	225	OSC. SECTION.
6AB5	6.3	6150-4030	0	100	SH	S5	----	EYE OPEN.
6AB5	6.3	6150-4230	0	100	SH	S5	----	EYE CLOSED.
6AB6	6.3	7250-3480	0	---	X2	S5	450	
6AB7	6.3	7240-8653	0	---	X4	S5	625	
6AB8	6.3	4590-6837	21	---	X4	S5	500	PENTODE SECTION.
6AB8	6.3	4520-1030	25	---	X2	S5	425	TRIODE SECTION.
6AC5	6.3	7250-3080	0	---	X2	S5	300	
6AC6	6.3	7250-3480	0	---	X2	S5	750	
6AD4	6.3	3610-8050	20	---	X2	S5	375	
6AD6	6.3	7240-3580	0	100	SH	S5	----	EYE 1 OPEN, EYE 2 CLOSED.
6AD6	6.3	7230-4580	0	100	SH	S5	----	EYE 2 OPEN, EYE 1 CLOSED.
6AD7	6.3	7250-3486	15	---	X2	S5	625	PENTODE SECTION.
6AD7	6.3	7210-6083	0	---	X2	S5	175	TRIODE SECTION.
6AE5	6.3	7250-3080	72	---	X2	S5	375	
6AE6	6.3	7250-4083	0	---	X2	S5	225	TRIODE NO. 1.
6AE6	6.3	7250-3084	0	---	X2	S5	250	TRIODE NO. 2.
6AE7	6.3	7260-3084	33	---	X2	S5	475	TRIODE NO. 1.
6AE7	6.3	7240-3056	33	---	X2	S5	475	TRIODE NO. 2.
6AF5	6.3	7250-3080	52	---	X2	S5	475	
6AF6	6.3	7240-3580	0	100	SH	S5	----	EYE 1 OPEN, EYE 2 CLOSED.
6AF6	6.3	7230-4580	0	100	SH	S5	----	EYE 2 OPEN, EYE 1 CLOSED.
6AH4	6.3	7210-5080	48	---	X4	S5	700	
6AH5	6.3	7260-4180	17	---	X10	S5	300	
6AH6	6.3	4310-5672	13	---	X10	S5	375	
6AH7	6.3	7851-6342	25	---	X2	S5	600	DUAL TRIODE. NOTE 1.
6AJ4	6.3	8710-5020	16	---	X10	S5	625	
6AJ5	6.3	4310-5620	13	---	X4	S4	400	
6AJ7	6.3	7240-8653	15	---	X10	S5	375	
6AK4	6.3	3610-8057	26	---	X4	S5	600	
6AK7	6.3	7240-8651	12	---	X10	S5	475	
6AL7	6.3	7260-3580	---	100	SH	S5	----	BIAS CONTROLS LEFT PATTERN. BIAS = VARY.
6AL7	6.3	7250-3480	---	100	SH	S5	----	BIAS CONTROLS BOTH PATTERNS. BIAS=VARY.
6AL7	6.3	7240-3580	---	100	SH	S5	----	BIAS CONTROLS RIGHT PATTERN. BIAS = VARY
6AM4	6.3	8710-5020	11	---	X10	S5	550	
6AM5	6.3	3410-5720	26	-	X4	S5	400	
6AN6	6.3	7100-5460	0	65	SH	S1	400	DUAL DIODE. NOTE 1.
6AN6	6.3	7100-3260	0	65	SH	S1	400	DUAL DIODE. NOTE 1.
6AQ6	6.3	4310-7020	15	---	X4	S5	175	TRIODE SECTION.
6AQ6	6.3	4300-6520	0	30	SH	S1	400	DUAL DIODE. NOTE 1.
6AQ7	6.3	7840-5060	13	---	X4	S5	250	TRIODE SECTION.
6AQ7	6.3	7800-1320	0	53	SH	S1	400	DUAL DIODE. NOTE 1.
6AR5	6.3	4310-5620	17	---	X4	S5	375	
6AR6	6.3	6870-3510	17	---	X10	S5	325	
6AR8	6.3	4560-9372	15	---	X4	S5	225	PLATE NO. 1.
6AR8	6.3	4560-8372	15	---	X4	S5	225	PLATE NO. 2.
6AS5	6.3	4320-7610	22	---	X10	--	350	HOLD DOWN S1 AND PRESS S5.
6AU7	6.3	4572-6183	25	---	X2	S5	675	DUAL TRIODE. NOTE 1.
6AV5	6.3	7210-5830	28	---	X10	S4	350	
6AW7	6.3	7820-6010	10	---	X4	S5	175	TRIODE SECTION.
6AW7	6.3	7800-3451	0	76	SH	S1	400	DUAL DIODE. NOTE 1.
6AX6	6.3	7200-5384	0	58	SH	S3	650	DUAL DIODE. NOTE 1.
6AX7	6.3	4572-6183	14	---	X4	S5	200	DUAL TRIODE. NOTE 1.
6AX8	6.3	4520-6370	10	---	X4	S5	475	PENTODE SECTION.
6AX8	6.3	4590-1080	10	---	X10	S5	525	TRIODE SECTION.
6AZ5	6.3	3600-8172	0	75	SH	S1	400	DUAL DIODE. NOTE 1.
6AZ6	6.3	3600-2745	0	78	SH	S1	400	DUAL DIODE. NOTE 1.
6B4	6.3	7250-3000	74	---	X4	S5	475	
6B5	6.3	6140-2350	0	---	X2	S5	525	
6B6	6.3	7200-3080	11	---	X4	S5	175	TRIODE SECTION. CAP = G.
6B6	6.3	7200-5480	11	32	SH	S1	400	DUAL DIODE. NOTE 1.
6B7	6.3	7100-2360	22	---	X2	S5	300	PENTODE SECTION. CAP = G.
SEE NEXT PAGE FOR CONTINUATION								

TUBE TYPE	FIL.	SELECTORS	BIAS	SHUNT	MULT	PRESS	MIN. MULT. COND	NOTATIONS
687	6.3	7100-5460	22	32	SH	S1	400	DUAL DIODE. NOTE 1.
688	6.3	7200-3681	22	---	X2	S5	300	PENTODE SECTION. CAP = G.
688	6.3	7200-5481	22	32	SH	S1	400	DUAL DIODE. NOTE 1.
68D5	6.3	7210-5830	21	---	X10	S5	300	
68D6	6.3	4310-5672	10	---	X4	S5	300	
68E7	6.3	4570-1639	29	---	X2	S5	300	
68E8	6.3	4590-6783	12	---	X4	S5	475	PENTODE SECTION.
68E8	6.3	4510-2030	10	---	X10	S5	525	TRIODE SECTION.
68F5	6.3	4310-5620	20	---	X10	--	475	HOLD DOWN S1 AND PRESS S5.
68F6	6.3	4310-7020	21	---	X2	S5	600	TRIODE SECTION.
68F6	6.3	4300-6520	0	30	SH	S1	400	DUAL DIODE. NOTE 1.
68F7	6.3	3672-8154	14	---	X10	S5	300	DUAL TRIODE. NOTE 1.
68F8	6.3	4500-9860	0	78	SH	S1	400	DUAL DIODE. NOTE 1.
68F8	6.3	4500-7360	0	78	SH	S1	400	DUAL DIODE. NOTE 1.
68F8	6.3	4500-2160	0	78	SH	S1	400	DUAL DIODE. NOTE 1.
68G6	6.3	7250-0830	18	---	X10	S5	375	CAP = P.
68G7	6.3	3672-8154	14	---	X10	S5	300	DUAL TRIODE. NOTE 1.
68J6	6.3	4310-5627	10	---	X2	S5	775	
68K5	6.3	4530-1860	0	---	X10	S5	475	
68K6	6.3	4310-7025	14	---	X4	S5	200	TRIODE SECTION.
68K6	6.3	4300-6527	0	53	SH	S1	400	DUAL DIODE. NOTE 1.
68K7	6.3	4572-6183	10	---	X10	S5	525	DUAL TRIODE. NOTE 1.
68L4	6.3	7800-5030	0	62	SH	S3	650	
68S8	6.3	4572-6183	16	---	X10	S5	450	DUAL TRIODE. NOTE 1.
68T6	6.3	4310-7020	15	---	X4	S5	175	TRIODE SECTION.
68T6	6.3	4300-6520	0	53	SH	S1	400	DUAL DIODE. NOTE 1.
68T8	6.3	4580-6790	10	---	X4	S5	700	PENTODE SECTION.
68T8	6.3	4500-1230	0	68	SH	S1	400	DUAL DIODE. NOTE 1.
68U6	6.3	4310-7020	21	---	X2	S5	600	TRIODE SECTION.
68U6	6.3	4300-6520	0	53	SH	S1	400	DUAL DIODE. NOTE 1.
68V8	6.3	4520-3010	19	---	X10	S5	350	TRIODE SECTION.
68V8	6.3	4500-9678	0	78	SH	S1	400	DUAL DIODE. NOTE 1.
68W4	6.3	4500-7190	0	40	SH	S3	400	DUAL DIODE. NOTE 1.
68X6	6.3	4520-7819	10	---	X10	S5	400	
68X7	6.3	7841-5263	35	---	X10	S5	475	DUAL TRIODE. NOTE 1.
68X8	6.3	4572-6183	11	---	X10	S4	300	DUAL TRIODE. NOTE 1.
68Y5	6.3	7200-5481	0	38	SH	S3	650	DUAL DIODE. NOTE 1.
68Z8	6.3	4572-6183	14	---	X10	S5	425	DUAL TRIODE. NOTE 1.
6C5	6.3	7250-3080	21	---	X2	S5	625	
6C6	6.3	6100-2354	21	---	X2	S5	375	CAP = G.
6C7	6.3	7100-2060	26	---	X2	S5	375	TRIODE SECTION. CAP = G.
6C7	6.3	7100-5460	26	30	SH	S1	400	DUAL DIODE. NOTE 1.
6C8	6.3	7205-3648	15	---	X2	S5	500	DUAL TRIODE. CAP = G. NOTE 1.
6CF6	6.3	4310-5627	10	---	X4	S5	700	
6CH7	6.3	4572-6183	17	---	X10	S5	425	DUAL TRIODE. NOTE 1.
6CH8	6.3	4570-2360	10	---	X4	S5	700	PENTODE SECTION.
6CH8	6.3	4580-9010	24	---	X4	S5	500	TRIODE SECTION.
6CJ6	6.3	4520-0731	51	---	X10	S5	275	CAP = P.
6CK6	6.3	4520-7136	0	---	X10	S5	550	
6CM8	6.3	4520-6730	10	---	X4	S5	700	PENTODE SECTION.
6CM8	6.3	4590-1080	12	---	X2	S5	475	TRIODE SECTION.
6CR6	6.3	4370-5612	13	---	X4	S5	300	PENTODE SECTION.
6CR6	6.3	4300-2010	0	30	SH	S1	400	DIODE SECTION.
6CR8	6.3	4520-6738	10	---	X4	S5	650	PENTODE SECTION.
6CR8	6.3	4590-1080	19	---	X4	S5	625	TRIODE SECTION.
6CU6	6.3	7250-0480	28	---	X10	S4	350	CAP = P.
6D4	6.3	4310-7050	---	93	SH	S6	650	STRIKES AT ABOUT 70. NOTE 6.
6D5	6.3	7250-3080	57	---	X2	S5	625	
6D7	6.3	7100-2364	21	---	X2	S5	375	CAP = G.
6D8	6.3	7200-3485	0	---	X2	S4	300	PENTODE SECTION. CAP = G.
6D8	6.3	7250-6483	22	---	X1	S5	225	OSC. SECTION.
6DA6	6.3	4520-7839	12	---	X4	S5	475	



TUBE TYPE	FIL.	SELECTORS	BIAS	SHUNT	MULT	PRESS	MIN. MUT. COND	NOTATIONS
6DA7	6.3	4570-6080	23	---	X4	S5	400	TRIODE NO. 1.
6DA7	6.3	4530-1090	55	---	X10	S5	275	TRIODE NO. 2.
6DB6	6.3	4310-5627	12	---	X4	S5	325	GRID NO. 1.
6DB6	6.3	4370-5621	17	---	X2	--	300	GRID NO. 3. HOLD DOWN S1 AND PRESS S5.
6DN6	6.3	7250-0830	28	---	X10	--	550	CAP = P. HOLD DOWN S1 AND PRESS S5.
6DW5	6.3	4530-9170	28	---	X10	S4	350	
6DX4	6.3	3420-1050	26	---	X10	S5	500	
6E5	6.3	6150-4030	0	100	SH	S5	----	EYE OPEN.
6E5	6.3	6150-4230	0	100	SH	S5	----	EYE CLOSED.
6E6	6.3	7153-6240	51	---	X2	S5	425	DUAL TRIODE. NOTE 1.
6E7	6.3	7100-2364	17	---	X2	S5	500	CAP = G.
6F4	6.3	6120-3070	18	---	X10	S4	375	
6F5	6.3	7200-4081	12	---	X4	S5	225	CAP = G.
6F6	6.3	7250-3481	23	---	X2	S5	625	
6F7	6.3	7100-2365	18	---	X2	S5	350	PENTODE SECTION. CAP = G.
6F7	6.3	7150-4063	35	---	X2	S5	150	TRIODE SECTION.
6F8	6.3	7205-3648	23	---	X4	S5	400	DUAL TRIODE. CAP = G. NOTE 1.
6FH6	6.3	7250-0480	36	---	X10	--	300	CAP = P. HOLD DOWN S1 AND PRESS S5.
6FR7	6.3	4570-6080	13	---	X2	S5	500	TRIODE NO. 1.
6FR7	6.3	4530-1090	60	---	X10	S5	425	TRIODE NO. 2.
6FW8	6.3	4572-6183	21	---	X10	S5	525	DUAL TRIODE. NOTE 1.
6G5	6.3	6150-4030	0	100	SH	S5	----	EYE OPEN.
6G5	6.3	6150-4230	0	100	SH	S5	----	EYE CLOSED.
6G6	6.3	7250-3480	17	---	X2	S5	725	
6GC6	6.3	2750-0830	50	---	X10	S5	300	CAP = P.
6GD7	6.3	4590-6780	10	---	X10	S5	475	PENTODE SECTION.
6GD7	6.3	4510-2030	17	---	X10	S5	575	TRIODE SECTION.
6GS8	6.3	4570-8219	0	---	X1	--	350	PENTODE NO. 1. HOLD DOWN S1 AND PRESS S5
6GS8	6.3	4570-3216	0	---	X1	--	350	PENTODE NO. 2. HOLD DOWN S1 AND PRESS S5
6GW5	6.3	4320-1050	19	---	X10	S5	300	
6H4	6.3	7200-4080	0	73	SH	S1	400	
6H5	6.3	6150-4030	0	100	SH	S5	----	EYE OPEN.
6H5	6.3	6150-4230	0	100	SH	S5	----	EYE CLOSED.
6H6	6.3	7200-5384	0	73	SH	S1	400	DUAL DIODE. NOTE 1.
6J5	6.3	7250-3080	23	---	X4	S5	400	
6J7	6.3	7200-3485	21	---	X2	S5	375	CAP = G.
6J8	6.3	7250-3486	12	---	X2	S5	300	HEPTODE SECTION. CAP = G.
6J8	6.3	7250-6084	23	---	X2	S5	500	TRIODE SECTION.
6JA8	6.3	4570-9860	12	---	X10	S5	525	TETRODE SECTION.
6JA8	6.3	4520-3010	23	---	X2	S5	475	TRIODE SECTION.
6K4	6.3	3420-1050	29	---	X4	S5	525	
6K5	6.3	7200-3080	15	---	X4	S5	225	CAP = G.
6K7	6.3	7200-3485	13	---	X2	S5	450	CAP = G.
6K8	6.3	7250-3486	11	---	X2	S5	300	HEXODE SECTION. CAP = G.
6K8	6.3	7250-6084	17	---	X4	S5	475	TRIODE SECTION.
6KS8	6.3	4570-9860	17	---	X10	S5	375	PENTODE SECTION.
6KS8	6.3	4520-3010	16	---	X4	S5	500	TRIODE SECTION.
6L4	6.3	6120-3070	16	---	X10	S4	375	
6L5	6.3	7250-3080	24	---	X2	S5	600	
6L7	6.3	7200-3485	10	---	X4	S5	175	CAP GRID. CAP = G.
6L7	6.3	7250-3481	14	---	X4	S5	175	PIN GRID.
6N4	6.3	4310-5020	18	---	X10	S5	375	
6N5	6.3	6150-4030	0	100	SH	S5	----	EYE OPEN.
6N5	6.3	6150-4230	0	100	SH	S5	----	EYE CLOSED.
6N6	6.3	7250-3480	0	---	X2	S5	525	
6N7	6.3	7254-6380	17	---	X2	S5	475	DUAL TRIODE. NOTE 1.
6N8	6.3	4520-6139	8	---	X4	--	350	PENTODE SECTION. HOLD DOWN S1 & PRESS S5
6N8	6.3	4500-7839	0	30	SH	S1	400	DUAL DIODE. NOTE 1.
6P5	6.3	7250-3080	32	---	X2	S5	450	
6P7	6.3	2300-4586	18	---	X2	S5	350	PENTODE SECTION. CAP = G.
6P7	6.3	2370-6084	35	---	X2	S5	150	TRIODE SECTION.
6Q4	6.3	4510-9030	10	---	X20	S5	375	
6Q5	6.3	7250-3080	---	93	SH	S6	650	STRIKES AT ABOUT 55. NOTE 6.

TUBE TYPE	FIL.	SELECTORS	BIAS	SHUNT	MULT	PRESS	MIN. MUT. COND	NOTATIONS
6Q6	6.3	7200-3080	13	---	X2	S5	300	TRIODE SECTION. CAP = G.
6Q6	6.3	7200-5480	13	30	SH	S1	400	DUAL DIODE. NOTE 1.
6Q7	6.3	7200-3081	15	---	X4	S5	175	TRIODE SECTION. CAP = G.
6Q7	6.3	7200-5483	15	30	SH	S1	400	DUAL DIODE. NOTE 1.
6R7	6.3	7200-3081	21	---	X2	S5	600	TRIODE SECTION. CAP = G.
6R7	6.3	7200-5483	21	30	SH	S1	400	DUAL DIODE. NOTE 1.
6R8	6.3	4580-9072	21	---	X2	S5	600	TRIODE SECTION.
6R8	6.3	4500-1678	0	78	SH	S1	400	DUAL DIODE. NOTE 1.
6R8	6.3	4500-2039	0	78	SH	S1	400	DIODE NO. 3.
6S7	6.3	7200-3485	12	---	X4	S5	275	CAP = G.
6S8	6.3	7800-6020	11	---	X4	S5	175	TRIODE SECTION. CAP = G.
6S8	6.3	7800-3452	11	38	SH	S1	400	DUAL DIODE. NOTE 1.
6S8	6.3	7800-1020	11	38	SH	S1	400	DIODE NO. 3.
6SA7	6.3	7250-3468	---	---	---	---	---	USE THIS SETTING FOR SHORT CHECK ONLY.
6SA7	6.3	7250-4068	32	---	X4	S5	475	DO NOT CHECK FOR SHORTS.
6SB7	6.3	7250-3468	---	---	---	---	---	USE THIS SETTING FOR SHORT CHECK ONLY.
6SB7	6.3	7250-4068	30	---	X4	S5	625	DO NOT CHECK FOR SHORTS.
6SC7	6.3	7843-5260	12	---	X4	S5	200	DUAL TRIODE. NOTE 1.
6SD7	6.3	7240-8653	10	---	X4	S5	475	
6SF5	6.3	7830-5021	12	---	X4	S5	225	
6SF7	6.3	7820-6431	10	---	X4	S5	300	PENTODE SECTION.
6SF7	6.3	7800-5436	0	30	SH	S1	400	DIODE SECTION.
6SG7	6.3	7240-8651	10	---	X4	S5	475	
6SH7	6.3	7240-8651	10	---	X10	S5	225	
6SJ7	6.3	7240-8653	18	---	X4	S5	250	
6SK7	6.3	7240-8653	10	---	X4	S5	300	
6SL7	6.3	7841-5263	13	---	X4	S5	250	DUAL TRIODE. NOTE 1.
6SQ7	6.3	7820-6031	11	---	X4	S5	175	TRIODE SECTION.
6SQ7	6.3	7800-5436	0	30	SH	S1	400	DUAL DIODE. NOTE 1.
6SR7	6.3	7820-6031	21	---	X2	S5	600	TRIODE SECTION.
6SR7	6.3	7800-5436	0	30	SH	S1	400	DUAL DIODE. NOTE 1.
6SS7	6.3	7240-8653	20	---	X4	S5	275	
6ST7	6.3	7820-6031	21	---	X2	S5	600	TRIODE SECTION.
6ST7	6.3	7800-5436	0	30	SH	S1	400	DUAL DIODE. NOTE 1.
6SU7	6.3	7841-5263	13	---	X4	S5	250	DUAL TRIODE. NOTE 1.
6SV7	6.3	7820-6430	11	---	X4	S5	400	PENTODE SECTION.
6SV7	6.3	7800-5030	0	75	SH	S1	400	DIODE SECTION.
6SZ7	6.3	7820-6031	15	---	X4	S5	175	TRIODE SECTION.
6SZ7	6.3	7800-5431	0	30	SH	S1	400	DUAL DIODE. NOTE 1.
6T5	6.3	6150-4030	0	100	SH	S5	---	EYE OPEN.
6T5	6.3	6150-4230	0	100	SH	S5	---	EYE CLOSED.
6T7	6.3	7200-3080	13	---	X2	S5	300	TRIODE SECTION. CAP = G.
6T7	6.3	7200-5480	13	30	SH	S1	400	DUAL DIODE. NOTE 1.
6U3	6.3	4500-9030	0	55	SH	S3	650	
6U4	6.3	7800-5030	0	52	SH	S3	650	
6U5	6.3	6150-4030	0	100	SH	S5	---	EYE OPEN.
6U5	6.3	6150-4230	0	100	SH	S5	---	EYE CLOSED.
6U6	6.3	7250-3480	17	---	X10	S4	375	
6U7	6.3	7200-3485	17	---	X2	S5	500	CAP = G.
6V4	6.3	4500-7130	0	0	SH	S3	650	DUAL DIODE. NOTE 1.
6V7	6.3	7200-3080	42	---	X2	S5	300	TRIODE SECTION. CAP = G.
6V7	6.3	7200-5480	42	30	SH	S1	400	DUAL DIODE. NOTE 1.
6V8	6.3	4560-1038	15	---	X4	S5	175	TRIODE SECTION.
6V8	6.3	4500-9032	0	30	SH	S1	400	DIODE NO. 1.
6V8	6.3	4500-7283	0	78	SH	S1	400	DUAL DIODE. NOTE 1.
6W5	6.3	7200-5380	0	20	SH	S3	650	DUAL DIODE. NOTE 1.
6W7	6.3	7200-3485	21	---	X2	S5	375	CAP = G.
6X6	6.3	2753-4086	99	99	SH	S6		EYES OPEN.
6X6	6.3	2750-4386	99	99	SH	S6		EYES CLOSED
6Y5	6.3	6100-5340	0	58	SH	S3	650	DUAL DIODE. NOTE 1.
6Y6	6.3	7250-3480	41	---	X10	S5	350	
6Y7	6.3	7254-6380	13	---	X2	S5	300	DUAL TRIODE. NOTE 1.

TUBE TYPE	FIL.	SELECTORS	BIAS	SHUNT	MULT	PRESS	MIN. MUT. COND	MUTATIONS
6Z5	6.3	1600-5040	0	30	SH	S3	650	PLATE NO. 1.
6Z5	6.3	2100-3040	0	30	SH	S3	650	PLATE NO. 2.
6Z7	6.3	7254-6380	14	---	X2	S5	375	DUAL TRIODE. NOTE 1.
6ZY5	6.3	7200-5380	0	15	SH	S3	650	DUAL DIODE. NOTE 1.
7A4	6.3	8160-2070	23	---	X4	S5	400	
7A5	6.3	8160-2370	0	---	X10	S4	350	
7A6	6.3	8100-6372	0	72	SH	S1	400	DUAL DIODE. NOTE 1.
7A7	6.3	8160-2374	10	---	X4	S5	300	
7A8	6.3	8140-5376	45	---	X2	S5	300	SECTION NO. 1.
7A8	6.3	8140-2576	40	---	X2	S5	150	SECTION NO. 2.
7AB7	6.3	7250-3140	10	---	X4	S5	250	
7AD7	6.3	8160-2374	13	---	X10	S5	400	
7AF7	6.3	8154-6372	27	---	X4	S5	325	DUAL TRIODE. NOTE 1.
7AG7	6.3	8160-2374	11	---	X4	S5	400	
7AH7	6.3	8160-2374	10	---	X4	S5	500	
7AJ7	6.3	8160-2374	8	---	X4	S5	350	
7AK7	6.3	8160-2374	0	---	X4	S5	300	
7B4	6.3	8160-2070	12	---	X4	S5	225	
7B5	6.3	8160-2370	17	---	X4	S5	375	
7B6	6.3	8130-2070	11	---	X4	S5	175	TRIODE SECTION.
7B6	6.3	8100-6572	0	30	SH	S1	400	DUAL DIODE. NOTE 1.
7B7	6.3	8160-2374	23	---	X4	S5	275	
7B8	6.3	8160-2574	0	---	X2	S4	300	PENTODE SECTION.
7B8	6.3	8140-3576	22	---	X1	S5	225	OSC. SECTION.
7C4	6.3	8100-4070	0	70	SH	S1	400	
7C5	6.3	8160-2370	18	---	X4	S5	575	
7C6	6.3	8130-2070	8	---	X4	S5	150	TRIODE SECTION.
7C6	6.3	8100-6572	0	30	SH	S1	400	DUAL DIODE. NOTE 1.
7C7	6.3	8160-2374	8	---	X4	S5	350	
7E5	6.3	8210-3040	18	---	X4	S5	475	
7E6	6.3	8130-2070	21	---	X2	S5	600	TRIODE SECTION.
7E6	6.3	8100-6572	0	30	SH	S1	400	DUAL DIODE. NOTE 1.
7E7	6.3	8160-2570	20	---	X4	S5	200	PENTODE SECTION.
7E7	6.3	8100-4372	0	30	SH	S1	400	DUAL DIODE. NOTE 1.
7F7	6.3	8154-6372	13	---	X4	S5	250	DUAL TRIODE. NOTE 1.
7F8	6.3	7281-6354	16	---	X4	S5	500	DUAL TRIODE. NOTE 1.
7G7	6.3	8160-2374	11	---	X10	S5	250	
7G8	6.3	8150-7362	11	---	X4	S5	325	TETRODE NO. 1.
7G8	6.3	8140-2367	11	---	X4	S5	325	TETRODE NO. 2.
7H7	6.3	8160-2374	10	---	X4	S5	475	
7J7	6.3	8160-2574	21	---	X2	S5	250	HEPTODE SECTION.
7J7	6.3	8140-3075	23	---	X2	S5	425	TRIODE SECTION.
7K7	6.3	8140-3020	13	---	X4	S5	250	TRIODE SECTION.
7K7	6.3	8100-5670	0	53	SH	S1	400	DUAL DIODE. NOTE 1.
7L7	6.3	8160-2374	12	---	X4	S5	400	
7N7	6.3	8154-6372	23	---	X4	S5	400	DUAL TRIODE. NOTE 1.
7Q7	6.3	8160-2374	0	---	X2	--	200	AMPL. SECTION. HOLD DOWN S1 AND PRESS S5
7Q7	6.3	8140-3076	14	---	X10	S5	350	OSC. SECTION.
7R7	6.3	8160-2570	8	---	X4	S5	425	PENTODE SECTION.
7R7	6.3	8100-4372	0	30	SH	S1	400	DUAL DIODE. NOTE 1.
7S7	6.3	8160-2574	16	---	X2	S5	475	HEPTODE SECTION.
7S7	6.3	8140-3075	14	---	X2	S5	525	TRIODE SECTION.
7T7	6.3	8160-2374	10	---	X4	S5	475	
7V7	6.3	8160-2374	8	---	X10	S5	250	
7W7	6.3	8160-2375	8	---	X10	S5	250	
7X6	6.3	8100-6372	0	45	SH	S3	650	DUAL DIODE. NOTE 1.
7X7	6.3	8130-2040	11	---	X4	S5	150	TRIODE SECTION.
7X7	6.3	8100-5647	0	77	SH	S1	400	DUAL DIODE. NOTE 1.
7Y4	6.3	8100-6370	0	20	SH	S3	650	DUAL DIODE. NOTE 1.
7Z4	6.3	8100-6370	0	35	SH	S3	400	DUAL DIODE. NOTE 1.
8CY7	7.5	4570-6080	13	---	X4	S5	200	TRIODE NO. 1.
8CY7	7.5	4520-1090	60	---	X4	S5	625	TRIODE NO. 2.
8HA6	7.5	4520-7613	11	---	X20	S5	400	



TUBE TYPE	FIL.	SELECTIONS	HIAS	SHUNT	MULT	PRESS	MIN. MUT. COND	NOTATIONS
8HG8	7.5	4520-8930	11	---	X10	S5	475	PENTODE SECTION.
8HG8	7.5	4560-7030	33	---	X10	S5	350	TRIODE SECTION.
8JE8	7.5	4570-9860	15	---	X10	S5	475	PENTODE SECTION.
8JE8	7.5	4520-3010	14	---	X4	S5	625	TRIODE SECTION.
8JK8	7.5	4570-6089	18	---	X10	S5	300	TRIODE NO. 1.
8JK8	7.5	4520-1039	15	---	X20	S5	350	TRIODE NO. 2.
8JT8	7.5	4570-9860	15	---	X10	S5	550	PENTODE SECTION.
8JT8	7.5	4520-3010	21	---	X2	S5	250	TRIODE SECTION.
8JU8	7.5	4500-2839	0	78	SH	S1	400	DIODE NO. 1 & 3. NOTE 1.
8JU8	7.5	4500-1728	0	78	SH	S1	400	DIODE NO. 2 & 4. NOTE 1.
8KS8	7.5	4570-9860	17	---	X10	S5	375	PENTODE SECTION.
8KS8	7.5	4520-3010	16	---	X4	S5	500	TRIODE SECTION.
8LE8	7.5	4590-6837	12	---	X2	S5	450	PENTODE NO. 1.
8LE8	7.5	4590-1832	12	---	X2	S5	450	PENTODE NO. 2.
8SN7	7.5	7841-5263	23	---	X4	S5	400	DUAL TRIODE. NOTE 1.
9BR7	10.0	4520-1030	14	---	X4	S5	625	TRIODE SECTION.
9BR7	10.0	4500-7680	0	78	SH	S1	400	DUAL DIODE. NOTE 1.
9CL8	10.0	4590-6780	10	---	X4	S5	550	TETRODE SECTION.
9CL8	10.0	4510-2030	12	---	X10	S5	425	TRIODE SECTION.
9DZ8	10.0	4530-6720	25	---	X4	S5	725	PENTODE SECTION.
9DZ8	10.0	4510-9080	17	---	X2	S5	250	TRIODE SECTION.
9U8	10.0	4520-6370	12	---	X4	S5	475	PENTODE SECTION.
9U8	10.0	4590-1080	10	---	X10	S5	525	TRIODE SECTION.
9X8	10.0	4570-9861	10	---	X4	S5	725	PENTODE SECTION.
9X8	10.0	4520-3061	15	---	X10	S5	350	TRIODE SECTION.
10	7.5	4130-2000	44	---	X2	S5	375	
10C8	10.0	4580-6790	13	---	X4	S5	625	PENTODE SECTION.
10C8	10.0	4520-1030	14	---	X4	S5	625	TRIODE SECTION.
10DA7	10.0	4570-6080	23	---	X4	S5	400	TRIODE NO. 1.
10DA7	10.0	4530-1090	55	---	X10	S5	275	TRIODE NO. 2.
10EB8	10.0	4570-9860	0	---	X10	S5	625	PENTODE SECTION.
10EB8	10.0	4520-3010	10	---	X2	S5	625	TRIODE SECTION.
10EW7	10.0	4570-6080	34	---	X2	S5	650	TRIODE NO. 1.
10EW7	10.0	4520-1090	56	---	X10	S5	475	TRIODE NO. 2.
10FD7	10.0	4570-6080	15	---	X2	S5	500	TRIODE NO. 1.
10FD7	10.0	4520-1090	60	---	X10	S5	475	TRIODE NO. 2.
10FR7	10.0	4570-6080	13	---	X2	S5	500	TRIODE NO. 1.
10FR7	10.0	4530-1090	60	---	X10	S5	425	TRIODE NO. 2.
10HA6	10.0	4520-7613	11	---	X20	S5	400	
10Y	7.5	4130-2000	44	---	X2	S5	375	
11C5	10.0	4320-7610	0	---	X10	S4	300	
12A	5.0	4130-2000	48	---	X2	S5	525	
12A4	12.6	4520-9010	25	---	X10	S5	500	
12A5	12.6	7140-2350	38	---	X2	S5	550	
12A6	12.6	7250-3481	18	---	X4	S5	475	
12A7	12.6	7100-2365	40	---	X2	S5	300	PENTODE SECTION. CAP = G.
12A7	12.6	7100-5042	40	30	SH	S3	650	RECT. SECTION.
12A8	12.6	7200-3485	0	---	X2	S4	300	PENTODE SECTION. CAP = G.
12A8	12.6	7250-6483	22	---	X1	S5	225	OSC. SECTION.
12AB5	12.6	4530-9170	18	---	X4	S5	575	
12AC6	12.6	4320-6571	20	15	SH	S1	400	MAKE NO GAS TEST.
12AD6	12.6	4370-6521	30	25	SH	S1	650	MAKE NO GAS TEST.
12AD7	12.6	4572-6183	14	---	X4	S5	200	DUAL TRIODE. NOTE 1.
12AE6	12.6	4300-7021	0	0	SH	S1	400	TRIODE SECTION. MAKE NO GAS TEST.
12AE6	12.6	4300-6520	0	30	SH	S1	400	DUAL DIODE. NOTE 1.
12AE7	12.6	4500-6087	0	67	SH	S1	650	TRIODE NO. 1. MAKE NO GAS TEST.
12AE7	12.6	4500-1032	0	70	SH	S1	650	TRIODE NO. 2. MAKE NO GAS TEST.
12AF6	12.6	4310-5672	25	---	X1	S5	725	
12AG6	12.6	4370-6521	30	50	SH	S1	650	MAKE NO GAS TEST.
12AH7	12.6	7851-6342	25	---	X2	S5	600	DUAL TRIODE. NOTE 1.
12AJ6	12.6	4300-7021	0	0	SH	S1	200	TRIODE SECTION. MAKE NO GAS TEST.
12AJ6	12.6	4300-6520	0	30	SH	S1	400	DUAL DIODE. NOTE 1.

TUBE TYPE	FIL.	SELECTORS	BIAS	SHUNT	MULT	PRESS	MIN. MUT. COND	NOTATIONS
12AL8	12.6	4500-3672	0	78	SH	S1	650	TETRODE SECTION. MAKE NO GAS TEST.
12AL8	12.6	4500-1098	0	0	SH	S1	250	TRIODE SECTION. MAKE NO GAS TEST.
12AS5	12.6	4320-7610	22	---	X10	--	350	HOLD DOWN S1 AND PRESS S5.
12AU8	12.6	4570-9860	10	---	X10	S5	375	PENTODE SECTION.
12AU8	12.6	4520-3010	13	---	X10	S5	300	TRIODE SECTION.
12AV7	12.6	4572-6183	10	---	X10	S5	525	DUAL TRIODE. NOTE 1.
12AW6	12.6	4310-5627	10	---	X4	S5	625	
12AX4	12.6	7800-5030	0	40	SH	S3	650	
12B7	12.6	8160-2374	10	---	X4	S5	300	
12B8	12.6	7200-3410	18	---	X4	S5	275	PENTODE SECTION. CAP = G.
12B8	12.6	7280-5060	7	---	X4	S5	300	TRIODE SECTION.
12BH7	12.6	4572-6183	28	---	X4	S5	475	DUAL TRIODE. NOTE 1.
12BK5	12.6	4530-1860	0	---	X10	S5	475	
12BK6	12.6	4310-7025	14	---	X4	S5	200	TRIODE SECTION.
12BK6	12.6	4300-6527	0	53	SH	S1	400	DUAL DIODE. NOTE 1.
12BL6	12.6	4320-6571	22	25	SH	S1	650	MAKE NO GAS TEST.
12BR7	12.6	4520-1030	14	---	X4	S5	625	TRIODE SECTION.
12BR7	12.6	4500-7680	0	78	SH	S1	400	DUAL DIODE. NOTE 1.
12BT6	12.6	4310-7020	15	---	X4	S5	175	TRIODE SECTION.
12BT6	12.6	4300-6527	0	53	SH	S1	400	DUAL DIODE. NOTE 1.
12BU6	12.6	4310-7020	21	---	X2	S5	600	TRIODE SECTION.
12BU6	12.6	4300-6527	0	53	SH	S1	400	DUAL DIODE. NOTE 1.
12BV7	12.6	4520-7813	0	---	X10	S5	500	
12BW4	12.6	4500-7190	0	40	SH	S3	400	DUAL DIODE. NOTE 1.
12BZ7	12.6	4572-6183	16	---	X2	S5	725	DUAL TRIODE. NOTE 1.
12C8	12.6	7200-3681	22	---	X2	S5	300	PENTODE SECTION. CAP = G.
12C8	12.6	7200-5483	22	32	SH	S1	400	DUAL DIODE. NOTE 1.
12CM6	12.6	4530-9170	18	---	X4	S5	575	
12CN5	12.6	4300-6712	0	55	SH	S1	650	MAKE NO GAS TEST.
12CT8	12.6	4580-6790	10	---	X10	S5	375	PENTODE SECTION.
12CT8	12.6	4520-1030	13	---	X10	S5	300	TRIODE SECTION.
12CX6	12.6	4320-6571	0	53	SH	S1	650	MAKE NO GAS TEST.
12DE8	12.6	4570-8691	0	32	SH	S1	400	PENTODE SECTION. MAKE NO GAS TEST.
12DE8	12.6	4500-3020	0	82	SH	S1	400	DIODE SECTION.
12DF5	12.6	4500-6183	0	40	SH	S3	400	DUAL DIODE. NOTE 1.
12DF7	12.6	4572-6183	14	---	X4	S5	200	DUAL TRIODE. NOTE 1.
12DK7	12.6	4500-3721	0	62	SH	S1	650	TETRODE SECTION. MAKE NO GAS TEST.
12DK7	12.6	4500-6920	0	30	SH	S1	400	DUAL DIODE. NOTE 1.
12DL8	12.6	4500-3627	0	81	SH	S1	650	TETRODE SECTION. MAKE NO GAS TEST.
12DL8	12.6	4500-9180	0	46	SH	S1	400	DUAL DIODE. NOTE 1.
12DQ4	12.6	7800-5030	0	45	SH	S3	650	
12DQ7	12.6	4520-7819	9	---	X10	S5	500	
12DS7	12.6	4570-3680	0	79	SH	S1	650	TETRODE SECTION. MAKE NO GAS TEST.
12DS7	12.6	4500-9180	0	44	SH	S1	400	DUAL DIODE. NOTE 1.
12DU7	12.6	4500-3621	0	68	SH	S1	650	TETRODE SECTION. MAKE NO GAS TEST.
12DU7	12.6	4500-9720	0	0	SH	S1	400	DUAL DIODE. NOTE 1.
12DV7	12.6	4500-6087	0	0	SH	S1	400	TRIODE SECTION. MAKE NO GAS TEST.
12DV7	12.6	4500-3210	0	0	SH	S1	400	DUAL DIODE. NOTE 1.
12DV8	12.6	4500-3627	0	77	SH	S1	400	TETRODE SECTION. MAKE NO GAS TEST.
12DV8	12.6	4500-9180	0	28	SH	S1	400	DUAL DIODE. NOTE 1.
12DW5	12.6	4530-9170	28	---	X10	S4	350	
12DW8	12.6	4570-6080	19	47	SH	S1	650	TRIODE NO. 1. MAKE NO GAS TEST.
12DW8	12.6	4520-1030	0	76	SH	S1	650	TRIODE NO. 2. MAKE NO GAS TEST.
12DW8	12.6	4500-9080	0	76	SH	S1	400	DIODE SECTION. MAKE NO GAS TEST.
12DY8	12.6	4500-3621	0	66	SH	S1	650	TETRODE SECTION. MAKE NO GAS TEST.
12DY8	12.6	4500-8079	0	24	SH	S1	400	TRIODE SECTION. MAKE NO GAS TEST.
12DZ6	12.6	4320-6571	0	60	SH	S1	650	MAKE NO GAS TEST.
12DZ8	12.6	4530-6720	25	---	X4	S5	725	PENTODE SECTION.
12DZ8	12.6	4510-9080	17	---	X2	S5	250	TRIODE SECTION.
12EA6	12.6	4320-6571	0	56	SH	S1	650	MAKE NO GAS TEST.
12EC8	12.6	4500-7689	0	21	SH	S1	650	PENTODE SECTION. MAKE NO GAS TEST.
12EC8	12.6	4500-2031	0	40	SH	S1	650	TRIODE SECTION. MAKE NO GAS TEST.
12ED5	12.6	3420-7610	0	---	X10	S4	425	

TUBE TYPE	FIL.	SELECTORS	BIAS	SHUNT	MULT	PRESS	MIN. MUT. COND.	NOTATIONS
12EG6	12.6	4370-6521	0	56	SH	S1	650	MAKE NO GAS TEST.
12EH5	12.6	4320-7610	13	---	X10	S5	450	
12EK6	12.6	4320-6571	0	60	SH	S1	650	MAKE NO GAS TEST.
12EL6	12.6	4300-2071	0	0	SH	S1	200	TRIODE SECTION. MAKE NO GAS TEST.
12EL6	12.6	4300-5670	0	30	SH	S1	400	DUAL DIODE. NOTE 1.
12EM6	12.6	4500-3621	0	62	SH	S1	650	TETRODE SECTION. MAKE NO GAS TEST.
12EM6	12.6	4500-9020	0	30	SH	S1	400	DIODE SECTION.
12EN6	12.6	7250-3480	38	---	X10	S5	375	
12EQ7	12.6	4520-7631	20	---	X2	S5	850	PENTODE SECTION.
12EQ7	12.6	4500-8030	0	30	SH	S1	400	DIODE SECTION.
12EZ6	12.6	4320-6571	0	49	SH	S1	650	MAKE NO GAS TEST.
12F5	12.6	7200-4080	12	---	X4	S5	225	CAP = G.
12F8	12.6	4590-2378	25	0	SH	S1	400	PENTODE SECTION. MAKE NO GAS TEST.
12F8	12.6	4500-6170	0	30	SH	S1	400	DUAL DIODE. NOTE 1.
12FK6	12.6	4310-7020	20	0	SH	S1	400	TRIODE SECTION. MAKE NO GAS TEST.
12FK6	12.6	4300-6520	0	30	SH	S1	400	DUAL DIODE. NOTE 1.
12FM6	12.6	4300-7021	0	25	SH	S1	650	TRIODE SECTION. MAKE NO GAS TEST.
12FM6	12.6	4300-6520	0	36	SH	S1	400	DUAL DIODE. NOTE 1.
12FR8	12.6	4530-6700	25	75	SH	S1	650	PENTODE SECTION. MAKE NO GAS TEST.
12FR8	12.6	4510-9020	10	50	SH	S1	625	TRIODE SECTION. MAKE NO GAS TEST.
12FR8	12.6	4500-8020	0	41	SH	S1	400	DIODE SECTION.
12FT6	12.6	4310-7020	0	43	SH	S1	650	TRIODE SECTION. MAKE NO GAS TEST.
12FT6	12.6	4300-6520	0	46	SH	S1	400	DUAL DIODE. MAKE NO GAS TEST. NOTE 1.
12FV7	12.6	4572-6183	25	---	X10	S5	550	DUAL TRIODE. NOTE 1.
12FX8	12.6	4590-1372	30	40	SH	S1	650	HEPTODE SECTION. MAKE NO GAS TEST.
12FX8	12.6	4560-8000	0	76	SH	S1	650	TRIODE SECTION. MAKE NO GAS TEST.
12G4	12.6	4360-1070	23	---	X4	S5	400	
12G8	12.6	4500-6078	0	65	SH	S1	650	TRIODE NO. 1. MAKE NO GAS TEST.
12G8	12.6	4500-1023	0	25	SH	S1	650	TRIODE NO. 2. MAKE NO GAS TEST.
12GA6	12.6	4370-6521	30	23	SH	S1	650	MAKE NO GAS TEST.
12H6	12.6	7200-5384	0	73	SH	S1	400	DUAL DIODE. NOTE 1.
12J5	12.6	7250-3081	23	---	X4	S5	400	
12J7	12.6	7200-3485	21	---	X2	S5	375	CAP = G.
12J8	12.6	4500-3621	0	65	SH	S1	650	TETRODE SECTION. MAKE NO GAS TEST.
12J8	12.6	4500-9070	0	78	SH	S1	400	DIODE NO. 1.
12J8	12.6	4500-8070	0	82	SH	S1	400	DIODE NO. 2.
12K7	12.6	7200-3485	18	---	X2	S5	450	CAP = G.
12K8	12.6	7250-3486	11	---	X2	S5	300	HEXODE SECTION. CAP = G.
12K8	12.6	7250-6084	17	---	X4	S5	475	TRIODE SECTION.
12KL8	12.6	4520-7631	5	---	X2	--	600	PENT. SECT. HOLD DOWN S1 AND PRESS S5.
12KL8	12.6	4500-8030	0	33	SH	S1	400	DIODE SECTION.
12L6	12.6	7250-3480	25	---	X10	--	375	HOLD DOWN S1 AND PRESS S5.
12L8	12.6	7610-8523	0	---	X2	S5	525	PENTODE NO. 1.
12L8	12.6	7630-4521	0	---	X2	S5	525	PENTODE NO. 2.
12Q7	12.6	7200-3080	15	---	X4	S5	175	TRIODE SECTION. CAP = G.
12Q7	12.6	7200-5483	15	30	SH	S1	400	DUAL DIODE. NOTE 1.
12R5	12.6	4320-7610	13	---	X10	--	425	HOLD DOWN S1 AND PRESS S5.
12S8	12.6	7800-6020	11	---	X4	S5	175	TRIODE SECTION. CAP = G.
12S8	12.6	7800-3452	11	38	SH	S1	400	DUAL DIODE. NOTE 1.
12S8	12.6	7800-1020	11	38	SH	S1	400	DIODE NO. 3.
12SA7	12.6	7250-3468	---	---	---	---	---	USE THIS SETTING FOR SHORT CHECK ONLY.
12SA7	12.6	7250-4068	32	---	X4	S5	475	DO NOT CHECK FOR SHORTS.
12SC7	12.6	7843-5260	12	---	X4	S5	200	DUAL TRIODE. NOTE 1.
12SF5	12.6	7830-5020	12	---	X4	S5	225	
12SF7	12.6	7820-6431	10	---	X4	S5	300	PENTODE SECTION.
12SF7	12.6	7800-5036	0	30	SH	S1	400	DIODE SECTION.
12SG7	12.6	7240-8651	10	---	X4	S5	475	
12SH7	12.6	7240-8651	10	---	X10	S5	225	
12SJ7	12.6	7240-8653	18	---	X4	S5	250	
12SK7	12.6	7240-8653	10	---	X4	S5	300	
12SL7	12.6	7841-5263	13	---	X4	S5	250	DUAL TRIODE. NOTE 1.
12SO7	12.6	7820-6031	11	---	X4	S5	175	TRIODE SECTION.
SEE NEXT PAGE FOR CONTINUATION								



TUBE TYPE	FIL.	SELECTORS	BIAS	SHUNT	MULT	PRESS	MIN. MUT. COND	NOTATIONS
12SQ7	12.6	7800-5436	0	30	SH	S1	400	DUAL DIODE. NOTE 1.
12SR7	12.6	7820-6031	21	---	X2	S5	600	TRIODE SECTION.
12SR7	12.6	7800-5436	0	30	SH	S1	400	DUAL DIODE. NOTE 1.
12SW7	12.6	7820-6031	21	---	X2	S5	600	TRIODE SECTION.
12SW7	12.6	7800-5436	0	30	SH	S1	400	DUAL DIODE. NOTE 1.
12SX7	12.6	7841-5263	23	---	X4	S5	400	DUAL TRIODE. NOTE 1.
12SY7	12.6	7280-3465	10	---	X4	--	150	AMPL. SECTION. HOLD DOWN S1 AND PRESS S5
12SY7	12.6	7250-4068	22	---	X4	S5	625	OSC. SECTION.
12U7	12.6	4500-6087	0	0	SH	S1	400	TRIODE NO. 1. MAKE NO GAS TEST.
12U7	12.6	4500-1032	0	0	SH	S1	400	TRIODE NO. 2. MAKE NO GAS TEST.
12Z3	12.6	4100-2030	0	35	SH	S3	650	
12Z5	6.3	6100-5040	0	30	SH	S3	650	PLATE NO. 1
12Z5	6.3	2100-3040	0	30	SH	S3	650	PLATE NO. 2.
13FR7	12.6	4570-6080	13	---	X2	S5	500	TRIODE NO. 1.
13FR7	12.6	4530-1090	60	---	X10	S5	425	TRIODE NO. 2.
14A4	12.6	8160-2070	23	---	X4	S5	400	
14A5	12.6	8160-2370	18	---	X4	S5	475	
14A7	12.6	8160-2374	10	---	X4	S5	300	
14AF7	12.6	8154-6372	27	---	X4	S5	325	DUAL TRIODE. NOTE 1.
14B6	12.6	8130-2070	11	---	X4	S5	175	TRIODE SECTION.
14B6	12.6	8100-6572	0	30	SH	S1	400	DUAL DIODE. NOTE 1.
14B8	12.6	8160-2574	0	---	X2	S4	300	PENTODE SECTION.
14B8	12.6	8140-3576	22	---	X1	S5	225	OSC. SECTION.
14C5	12.6	8160-2370	18	---	X4	S5	575	
14C7	12.6	8160-2374	8	---	X4	S5	350	
14E6	12.6	8130-2070	21	---	X2	S5	600	TRIODE SECTION.
14E6	12.6	8100-6572	0	30	SH	S1	400	DUAL DIODE. NOTE 1.
14E7	12.6	8160-2570	20	---	X4	S5	200	PENTODE SECTION.
14E7	12.6	8100-4372	0	30	SH	S1	400	DUAL DIODE. NOTE 1.
14F7	12.6	8154-6372	13	---	X4	S5	250	DUAL TRIODE. NOTE 1.
14F8	12.6	7281-6354	16	---	X4	S5	500	DUAL TRIODE. NOTE 1.
14H7	12.6	8160-2374	10	---	X4	S5	475	
14J7	12.6	8160-2574	21	---	X2	S5	250	HEPTODE SECTION.
14J7	12.6	8140-3075	23	---	X2	S5	425	TRIODE SECTION.
14N7	12.6	8154-6372	23	---	X4	S5	400	DUAL TRIODE. NOTE 1.
14Q7	12.6	8160-2374	0	---	X2	--	200	AMPL. SECTION. HOLD DOWN S1 & PRESS S5.
14Q7	12.6	8140-3076	14	---	X10	S5	350	OSC. SECTION.
14R7	12.6	8160-2570	8	---	X4	S5	425	PENTODE SECTION.
14R7	12.6	8100-4372	0	30	SH	S1	400	DUAL DIODE. NOTE 1.
14S7	12.6	8160-2574	16	---	X2	S5	475	HEPTODE SECTION.
14S7	12.6	8140-3075	14	---	X2	S5	525	TRIODE SECTION.
14V7	12.6	8160-2374	8	---	X10	S5	250	
14W7	12.6	8160-2375	8	---	X10	S5	250	
14X7	12.6	8130-2040	11	---	X4	S5	150	TRIODE SECTION.
14X7	12.6	8100-5647	0	77	SH	S1	400	DUAL DIODE. NOTE 1.
14Y4	12.6	8100-6370	0	45	SH	S3	400	DUAL DIODE. NOTE 1.
14Z3	12.6	4100-2030	0	35	SH	S3	650	
15	2.0	5100-2340	0	---	X2	--	225	CAP = G. HOLD DOWN S1 AND PRESS S5.
15A6	12.6	4520-7136	8	---	X10	S5	475	
15EA7	17.0	7840-5060	22	---	X2	S5	400	TRIODE NO. 1. SET 'LINE ADJUST' AT 700 ON 1500 SCALE.
15EA7	17.0	7810-2030	59	---	X10	S5	375	TRIODE NO. 2.
15EW6	12.6	4310-5627	10	---	X10	S5	675	SET 'LINE ADJUST' AT 110 ON 200 SCALE.
17AV5	17.0	7210-5830	28	---	X10	S4	350	
17CA5	17.0	4320-7610	20	---	X10	S5	300	
17DQ4	17.0	7800-5030	0	45	SH	S3	650	
17HC8	17.0	4530-6720	17	---	X4	S5	700	PENTODE SECTION.
17HC8	17.0	4510-9080	10	---	X2	S5	600	TRIODE SECTION.
17JK8	17.0	4570-6089	18	---	X10	S5	300	TRIODE NO. 1.
17JK8	17.0	4520-1039	15	---	X20	S5	350	TRIODE NO. 2.
17L6	17.0	7250-3480	40	---	X10	S5	375	
17R5	17.0	4320-7610	13	---	X10	--	375	HOLD DOWN S1 AND PRESS S5.
18DZ8	20.0	4530-6720	25	---	X4	S5	725	PENTODE SECTION.
SEE NEXT PAGE FOR CONTINUATION								

TUBE TYPE	FIL.	SELECTORS	BIAS	SHUNT	MULT	PRESS	MIN. MUT. COND	NOTATIONS
18DZ8	20.0	4510-9080	17	---	X2	S5	250	TRIODE SECTION.
18H88	20.0	4590-7680	24	---	X4	S5	475	PENTODE SECTION. HOLD DOWN LIFE TEST.
18H88	20.0	4510-3020	15	---	X4	S5	475	TRIODE SECTION. HOLD DOWN LIFE TEST.
19	2.0	6143-5200	23	---	X2	S5	300	DUAL TRIODE. NOTE 1.
19BG6	20.0	7250-0830	18	---	X10	S5	375	CAP = P.
19C8	20.0	4580-9070	14	---	X4	S5	200	TRIODE SECTION.
19C8	20.0	4500-6273	0	78	SH	S1	400	DUAL DIODE. NOTE 1.
19C8	20.0	4500-1070	0	78	SH	S1	400	DIODE NO. 3.
19DE7	20.0	4570-6080	30	---	X2	S5	625	TRIODE NO. 1.
19DE7	20.0	4520-1090	55	---	X4	S5	775	TRIODE NO. 2.
19J6	20.0	4356-2170	17	---	X10	S5	325	DUAL TRIODE. NOTE 1.
19T8	20.0	4580-9076	15	---	X4	S5	175	TRIODE SECTION.
19T8	20.0	4500-6273	0	78	SH	S1	400	DUAL DIODE. NOTE 1.
19T8	20.0	4500-1078	0	78	SH	S1	400	DIODE NO. 3.
19V8	20.0	4560-1038	15	---	X4	S5	175	TRIODE SECTION.
19V8	20.0	4500-9032	0	30	SH	S1	400	DIODE NO. 1.
19V8	20.0	4500-7283	0	78	SH	S1	400	DUAL DIODE. NOTE 1.
19X3	20.0	4500-9030	0	50	SH	S3	650	
19Y3	20.0	4500-9030	0	50	SH	S3	650	
RK20A	7.5	5130-0240	0	---	X2	S5	625	CAP = P.
20EQ7	20.0	4520-7631	20	---	X2	S5	850	PENTODE SECTION.
20EQ7	20.0	4500-8030	0	30	SH	S1	400	DIODE SECTION.
21A6	20.0	4520-0839	42	---	X10	S5	375	CAP = P.
21EX6	20.0	7250-0830	53	---	X10	S5	550	CAP = P. TUBES INDICATING SHORTS# RE-TEST USING 7250-0130.
22	3.0	4100-2300	0	---	X1	S5	300	CAP = G.
24A	2.5	5100-2340	25	---	X2	S5	300	CAP = G.
VT25A	7.5	4130-2000	44	---	X2	S5	375	
25A6	25.0	7250-3480	18	---	X4	S5	350	
25A7	25.0	7250-3486	32	---	X2	S5	550	PENTODE SECTION.
25A7	25.0	7200-6013	0	40	SH	S3	650	RECT. SECTION.
25AC5	25.0	7250-3080	0	---	X2	S5	475	
25B5	25.0	6140-2350	0	---	X2	S5	625	
25B6	25.0	7250-3480	20	---	X10	S4	300	
25B8	25.0	7200-3410	18	---	X4	S5	275	PENTODE SECTION. CAP = G.
25B8	25.0	7280-5060	7	---	X4	S5	300	TRIODE SECTION.
25C6	25.0	7250-3480	41	---	X10	S5	350	
25C6	25.0	7250-0480	28	---	X10	S4	350	CAP = P.
25D8	25.0	7200-3410	18	---	X4	S5	300	PENTODE SECTION. CAP = G.
25D8	25.0	7250-6010	12	---	X4	S5	175	TRIODE SECTION.
25D8	25.0	7200-8010	12	53	SH	S1	400	DIODE SECTION.
25DK4	25.0	3400-5070	0	57	SH	S3	650	
25D06	25.0	7250-0480	36	---	X10	--	300	CAP = P. HOLD DOWN S1 AND PRESS S5.
25DT5	25.0	4530-9170	22	---	X10	S5	325	
25N6	25.0	7250-3480	0	---	X2	S5	625	
25T	6.3	4130-0000	0	---	X2	S5	275	CAP = P.
25W6	25.0	7250-3480	25	---	X10	--	375	HOLD DOWN S1 AND PRESS S5.
25Y5	25.0	6100-5243	0	30	SH	S3	650	DUAL DIODE. NOTE 1.
25Z3	25.0	6100-5243	0	30	SH	S3	650	DUAL DIODE. NOTE 1.
25Z4	25.0	7200-5080	0	50	SH	S3	650	
25Z5	25.0	6100-5243	0	30	SH	S3	650	DUAL DIODE. NOTE 1.
25Z6	25.0	7200-5384	0	30	SH	S3	650	DUAL DIODE. NOTE 1.
26	1.4	4130-2000	39	---	X2	S5	350	
26A6	25.0	4310-5672	8	---	X4	S5	475	
26A7	25.0	7610-8523	8	---	X10	S4	350	PENTODE NO. 1.
26A7	25.0	7630-4521	8	---	X10	S4	350	PENTODE NO. 2.
26BK6	25.0	4310-7025	14	---	X4	S5	200	TRIODE SECTION.
26BK6	25.0	4300-6527	0	53	SH	S1	400	DUAL DIODE. NOTE 1.
26C6	25.0	4310-7020	21	---	X2	S5	600	TRIODE SECTION.
26C6	25.0	4300-6527	0	30	SH	S1	400	DUAL DIODE. NOTE 1.
26D6	25.0	4370-5621	0	---	X2	--	250	AMPL. SECTION. HOLD DOWN S1 AND PRESS S5
26D6	25.0	4310-6027	20	---	X10	S5	400	OSC. SECTION.
26E6	25.0	7250-3480	0	---	X10	--	400	HOLD DOWN S1 AND PRESS S5.

TUBE TYPE	FIL.	SELECTORS	BIAS	SHUNT	MULT	PRESS	MIN. MULT. COND	NOTATIONS
26Z5W	25.0	4500-6183	0	30	SH	S3	650	DUAL DIODE. NOTE 1.
27	2.5	5130-2040	41	---	X2	S5	300	
30	2.0	4130-2000	43	---	X2	S5	275	
31	2.0	4130-2000	41	---	X2	S5	275	
32	2.0	4100-2300	20	---	X2	--	200	CAP = G. HOLD DOWN S1 AND PRESS S5.
32L7	35.0	7250-3480	16	---	X10	S4	300	PENTODE SECTION.
32L7	35.0	7200-6013	0	45	SH	S3	650	RECT. SECTION.
33	2.0	5130-2400	27	---	X2	S5	400	
RK33	6.3	7104-3526	35	---	X2	S5	425	DUAL TRIODE. CAP = G. NOTE 1.
34	2.0	4100-2300	16	---	X2	--	175	CAP = G. HOLD DOWN S1 AND PRESS S5.
35	2.5	5100-2340	20	---	X2	S5	300	CAP = G.
35A5	35.0	8160-2370	0	---	X10	S4	300	
35CD6	35.0	7250-0830	29	---	X10	S4	375	CAP = P.
35DZ8	35.0	4530-6720	25	---	X4	S5	725	PENTODE SECTION.
35DZ8	35.0	4510-9080	17	---	X2	S5	250	TRIODE SECTION.
35Y4	35.0	8100-2070	0	50	SH	S3	650	
35Z3	35.0	8100-2070	0	50	SH	S3	650	
35Z4	35.0	7200-5080	0	50	SH	S3	650	
35Z6	35.0	7200-5384	0	50	SH	S3	650	DUAL DIODE. NOTE 1.
36	6.3	5100-2340	31	---	X2	S5	325	CAP = G.
37	6.3	5130-2040	42	---	X2	S5	275	
38	6.3	5100-2340	35	---	X2	S5	325	CAP = G.
39/44	6.3	5100-2340	25	---	X2	S5	300	CAP = G.
40	5.0	4130-2000	20	---	X1	S5	125	
40Z5	50.0	7200-5080	0	53	SH	S3	650	
41	6.3	6140-2350	17	---	X4	S5	375	
42	6.3	6140-2350	23	---	X2	S5	625	
43	25.0	6140-2350	18	---	X4	S5	350	
45	2.5	4130-2000	57	---	X2	S5	575	
45Z3	50.0	7100-2040	0	44	SH	S3	650	
45Z5	50.0	7200-5080	0	53	SH	S3	650	
46	2.5	5130-2400	0	---	X2	S5	625	
47	2.5	5130-2400	0	---	X2	S5	625	
48	25.0	6140-2350	45	---	X2	S5	625	
49	2.0	5130-2400	49	---	X2	S5	350	
50	7.5	4130-2000	60	---	X2	S5	475	
50A5	50.0	8160-2370	25	---	X10	--	375	HOLD DOWN S1 AND PRESS S5.
50B5	50.0	4310-5620	13	---	X10	--	475	HOLD DOWN S1 AND PRESS S5.
50BK5	50.0	4530-1860	0	---	X10	S5	475	
50C6	50.0	7250-3481	41	---	X10	S5	350	
50CA5	50.0	3420-7610	0	---	X10	S5	425	
50FA5	50.0	3420-7610	39	---	X4	S5	700	
50FY8	50.0	4530-6720	32	---	X10	S5	275	PENTODE SECTION.
50FY8	50.0	4510-9080	21	---	X2	S5	475	TRIODE SECTION.
50L6	50.0	7250-3480	25	---	X10	--	375	HOLD DOWN S1 AND PRESS S5.
50X6	50.0	8100-6372	0	45	SH	S3	650	DUAL DIODE. NOTE 1.
50Y6	50.0	7200-5384	0	45	SH	S3	650	DUAL DIODE. NOTE 1.
50Y7	50.0	7200-5384	0	45	SH	S3	650	DUAL DIODE. NOTE 1.
50Z7	50.0	7200-5384	0	45	SH	S3	650	DUAL DIODE. NOTE 1.
51/51S	2.5	5100-2340	20	---	X2	S5	325	CAP = G.
HD51	0FF	0000-5020	---	---	VR	S9	150	V. 155V. REG. = 2 V. FROM 5 TO 30 MA.
52	6.3	5130-2400	0	---	X2	S5	750	
53	2.5	7153-6240	17	---	X2	S5	475	DUAL TRIODE. NOTE 1.
55	2.5	6100-2050	42	---	X2	S5	300	TRIODE SECTION. CAP = G.
55	2.5	6100-4350	42	30	SH	S1	400	DUAL DIODE. NOTE 1.
56	2.5	5130-2040	32	---	X2	S5	450	
57	2.5	6100-2354	21	---	X2	S5	375	CAP = G.
57A	6.3	6100-2354	21	---	X2	S5	375	CAP = G.
58	2.5	6100-2354	17	---	X2	S5	500	CAP = G.
58A/58AS	6.3	6100-2354	17	---	X2	S5	500	CAP = G.
59	2.5	7140-2365	0	---	X2	S5	625	
HY65	6.3	7250-0408	0	---	X4	S5	425	CAP = P.



TEST DATA  
MODEL 752 & 752A  
TUBE TESTERS

THE HICKOK ELECTRICAL INSTRUMENT CO.  
10514 DUPONT AVENUE • CLEVELAND, OHIO 44108  
PHONE—(216) 541-8060 TWX—810-421-8286  
PRINTED IN U.S.A.

# GENERAL TEST DATA

For further information see

OBSOLETE TUBE TYPES

FOREIGN TUBE TYPES

TUBE TYPE	FIL.	SELECTORS	BIAS	SHUNT	MULT.	PRESS	MIN. MUT. COND.	NOTATIONS
12BA11	12.6	1C90-B0AD	30	---	X2	S5	550	TRIODE SECT.
12DZ8	12.6	4530-6720	25	---	X4	S5	725	PENT. SECT.
12DZ8	12.6	4510-9080	17	---	X2	S5	500	TRIODE SECT.
15AB9†	12.6	5690-78A0	16	---	X10	S5	375	TETRODE NO. 1 USE ADAPTER SA-11-1050-177.
15AB9	12.6	5630-1240	16	---	X10	S5	375	TETRODE NO. 2
17BD11†	17.0	1CB0-2A90	15	---	X10	S5	450	PENT. SECT.
17BD11	17.0	1C60-8050	14	---	X4	S5	800	TRIODE NO. 1
17BD11	17.0	1C30-4070	14	---	X4	S5	700	TRIODE NO. 2
17GY5†	17.0	1C50-07A0	32	---	X10	--	675	CAP=P HOLD DOWN S1 AND PRESS S5.
23MB6†	25.0	1C50-0324	75	---	X4	S5	900	CAP=P
24LZ6†	25.0	4520-0738	73	---	X4	S5	650	CAP=P
25DK3	25.0	4500-2000	0	78	SH	S3	400	CONNECT CAP TO EXT. SELF BIAS RES. JACK MODEL 752A CAP=K.
25DL3	25.0	4500-2000	0	78	SH	S3	400	CONNECT CAP TO EXT. SELF BIAS RES. JACK MODEL 752A CAP=K.
31LR8†	35.0	4520-6730	40	---	X10	S5	350	PENT. SECT. USE ADAPTER SA-4, 1050-144.
31LR8	35.0	4590-8010	21	---	X4	S5	350	TRIODE SECT.
31LZ6†	35.0	4520-0738	73	---	X4	S5	650	CAP=P
34DK3	35.0	4500-2000	0	78	SH	S3	400	CONNECT CAP TO EXT. SELF BIAS RES. JACK MODEL 752A CAP=K.
36LW6	35.0	8750-0320	70	---	X10	S5	475	CAP=P
8950†	12.6	1C50-0324	75	---	X4	S5	900	CAP=P





TUBE TYPE	FIL.	SELECTORS	BIAS	SHUNT	MULT	PRESS	MIN. MUT. COND	NOTATIONS
1AJ4	1.4	7160-2300	25	---	X2	S5	175	PENTODE SECTION. DIODE SECTION. PENTODE SECTION. DIODE SECTION.
1AR5	1.4	1760-5400	9	---	X1	S5	375	
1AR5	1.4	1700-3000	0	0	SH	S1	250	
1AS5	1.4	1760-2300	9	---	X1	S5	375	
1AS5	1.4	1700-4000	0	0	SH	S1	250	
1BG2	1.4	2700-0000	0	88	SH	S6	400	CONNECT FIL. LEADS TO OCTAL SOCKET PINS 2 & 7. SINGLE LEAD = P.
1BK2	1.4	4200-0000	0	85	SH	S6	400	CAP=P.
1BQ2	1.4	1200-0000	0	86	SH	S6	400	CAP=P.
1BX2	1.4	1200-0000	0	80	SH	S6	400	CAP=P.
1C1	1.4	1740-3062	10	---	X2	S4	425	
1D13	1.4	7100-2030	0	0	SH	S1	400	TOP LEAD=P. CONNECT FIL. LEADS TO PINS 1 AND 2.
1D-K29	1.1	1200-0000	0	---	X1	S3	400	
1F2	1.4	7160-2300	19	---	X2	S5	325	ADJUST BIAS TO VARY BAR LENGTH. DO NOT ADJUST BIAS BELOW 30.
1F3	1.4	1760-2300	0	---	X2	S4	225	
1M3	1.4	4510-8000	---	100	---	S6	---	
1N3	1.4	4510-8000	---	100	---	S6	---	ADJUST BIAS TO VARY BAR LENGTH. DO NOT ADJUST BIAS BELOW 30.
1P10	2.5	7130-2400	23	---	X2	S4	475	HOLD DOWN S1 AND PRESS S5. USE ADAPTER SA-3, 1050-127 OR ADAPTER CA-4, 1050-135. NOTE 7. FOR MODEL 752A# USE SELECTORS AC40-2080 - DATA SAME AS ABOVE. NO ADAPTER REQUIRED. CAP=P. MODEL 752# NOTE 7.
1P11	3.0	7160-2300	0	---	X4	---	300	
2B-H5	2.0	3140-2080	10	---	X10	S4	575	
2BU2	2.5	1C00-0000	0	85	SH	S6	400	
2ER5	2.0	4320-5670	11	---	X10	S5	650	USE ADAPTER SA-3, 1050-127 OR ADAPTER CA-4, 1050-135. NOTE 7. FOR MODEL 752A# USE SELECTORS AC40-2080- DATA SAME AS ABOVE. NO ADAPTER REQUIRED. NOTE 7.
2FY5	2.5	4320-5016	13	---	X10	S5	800	
2HA5	2.0	4310-5076	17	---	X10	S5	475	
2N-H11	2.0	3140-2080	9	---	X10	S4	600	
2N-H12	2.0	AC60-1070	13	---	X10	S4	700	
3AJ8	3.0	4520-6137	15	---	X2	S5	475	HEPTODE SECTION.
3AJ8	3.0	4590-8032	20	---	X4	S5	475	TRIODE SECTION.
3BH2	3.0	8100-0000	0	90	SH	S6	400	CAP = P. USE ADAPTER SA-8, 1050-168.
3BX6	3.0	4520-7819	10	---	X10	S5	400	
3BY7	3.0	4520-7819	17	---	X4	S5	550	
3EH7	3.0	5420-7819	17	---	X4	S5	650	
3EJ7	3.0	5420-7819	10	---	X10	S5	500	
3ER5	3.0	4320-5670	11	---	X10	S5	650	
3FY5	3.0	4320-5016	13	---	X10	S5	800	
3HA5	2.5	4310-5076	17	---	X10	S5	475	
3M-P26	3.0	3410-5620	45	---	X4	S5	575	PENTODE SECTION. TRIODE SECTION. PENTODE SECTION. TRIODE SECTION.
4A88	4.3	5490-6837	21	---	X4	S5	500	
4A88	4.3	5420-1030	25	---	X2	S5	425	
4BL8	4.3	4520-6371	12	---	X4	S5	625	
4BL8	4.3	4590-1086	26	---	X4	S5	675	
4BN4	4.3	4320-5010	16	---	X10	S5	425	
4CM4	4.3	4520-1030	14	---	X10	S5	880	
4DL4	4.3	5490-8020	14	---	X20	S5	475	
4EH7	4.3	5420-7819	17	---	X4	S5	650	
4EJ7	4.3	5420-7819	10	---	X10	S5	500	
4ER5	3.0	4320-5670	11	---	X10	S5	650	DUAL TRIODE. NOTE 1.
4ES8	4.3	5472-6183	22	---	X10	S5	475	
4FY5	4.3	4320-5016	13	---	X10	S5	800	
4GJ7	4.3	5420-6710	10	---	X10	S5	475	PENTODE SECTION.
4GJ7	4.3	5490-8030	29	---	X10	S5	550	TRIODE SECTION.
4GS7	4.3	4590-6780	10	---	X10	S5	500	PENTODE SECTION.
4GS7	4.3	4510-2030	33	---	X10	S5	300	TRIODE SECTION.
4HA5	4.3	4310-5076	17	---	X10	S5	475	
4HG8	4.3	4520-8930	11	---	X10	S5	525	PENTODE SECTION.
4HG8	4.3	4560-7030	33	---	X10	S5	380	TRIODE SECTION.

TUBE TYPE	FIL.	SELECTORS	BIAS	SHUNT	MULT	PRESS	MIN. MUT. COND	NOTATIONS
4KN8	4.3	4572-6183	18	---	X20	S5	450	DUAL TRIODE. NOTE 1.
4M-P12	5.0	3410-5620	18	---	X4	S5	575	
4M-P26	4.3	3410-5620	45	---	X4	S5	575	
4R-HH2	4.3	4572-6183	15	---	X10	S5	500	DUAL TRIODE. NOTE 1.
4R-HH8	4.3	4572-6183	18	---	X20	S5	450	DUAL TRIODE. NOTE 1.
5AR4	5.0	8200-6400	0	68	SH	S3	650	DUAL DIODE. NOTE 1.
5ES8	5.0	5472-6183	22	---	X10	S5	475	DUAL TRIODE. NOTE 1.
5GJ7	5.0	5420-6710	10	---	X10	S5	475	PENTODE SECTION.
5GJ7	5.0	5490-8030	29	---	X10	S5	550	TRIODE SECTION.
5GS7	5.0	4590-6780	10	---	X10	S5	500	PENTODE SECTION.
5GS7	5.0	4510-2030	33	---	X10	S5	300	TRIODE SECTION.
5HG8	5.0	4520-8930	11	---	X10	S5	525	PENTODE SECTION.
5HG8	5.0	4560-7030	33	---	X10	S5	375	TRIODE SECTION.
5M-HH3	5.0	3465-1270	16	---	X10	S5	560	DUAL TRIODE. NOTE 1.
5M-K9	5.0	3400-5030	0	52	SH	S3	600	
5U9	6.3	5630-7824	14	---	X10	S5	375	PENTODE SECTION. USE ADAPTER SA-11, 1050-177. MODEL 752# USE SA-11 & CA-4. NOTE 7.
5U9	6.3	56A8-9010	30	---	X10	S5	300	TRIODE SECTION.
5V9	5.0	5630-7412	15	---	X1	--	700	HEPTODE SECTION. HOLD DOWN S1 & PRESS S4 USE ADAPTER SA-11, 1050-177. MODEL 752# USE SA-11 & CA-4. NOTE 7.
5V9	5.0	5680-A090	23	---	X4	S5	650	TRIODE SECTION.
5X9	6.3	5630-7824	15	---	X10	S5	375	PENTODE SECTION. USE ADAPTER SA-11, 1050-177. MODEL 752# USE SA-11 & CA-4. NOTE 7.
5X9	6.3	56A0-9010	14	---	X4	S5	750	TRIODE SECTION.
6AB8	6.3	5490-6837	21	---	X4	S5	500	PENTODE SECTION
6AB8	6.3	5420-1030	25	---	X2	S5	425	TRIODE SECTION.
6AB9	6.3	5690-78A0	16	---	X10	S5	375	TETRODE NO. 1. USE ADAPTER SA-11, 1050-177. MODEL 752# USE SA-11 & CA-4. NOTE 7.
6AB9	6.3	5630-1240	16	---	X10	S5	375	TETRODE NO. 2.
6AF9	6.3	5680-A970	16	---	X10	S5	650	PENTODE NO. 1. (SEE BELOW).
6AF9	6.3	5610-4320	12	---	X10	S5	450	PENTODE NO. 2. USE ADAPTER SA-11, 1050-177. MODEL 752# USE SA-11 & CA-4. NOTE 7.
6AJ8	6.3	4520-6137	15	---	X2	S5	475	HEPTODE SECTION.
6AJ8	6.3	4590-8032	20	---	X4	S5	475	TRIODE SECTION.
6AK8	6.3	4580-9070	15	---	X4	S5	175	TRIODE SECTION.
6AK8	6.3	4500-6070	0	35	SH	S1	400	DIODE NO. 1.
6AK8	6.3	4500-2137	0	78	SH	S1	400	DUAL DIODE. NOTE 1.
6AL3	6.3	4500-9000	0	56	SH	S3	800	CONNECT CAP TO EXT. SELF BIAS RES. JACKS MODEL 752A# CAP=K
6AM5	6.3	4310-5720	26	---	X4	S5	400	
6AM6	6.3	4310-5726	11	---	X10	S5	300	
6AQ4	6.3	4310-7050	0	---	X10	S5	525	
6AQ8	6.3	4572-6183	14	---	X4	S5	625	DUAL TRIODE. NOTE 1.
6B-B14	6.3	4510-0630	59	---	X4	S5	250	CAP=P. USE ADAPTER SA-8, 1050-168.
6BD7A	6.3	4520-1030	9	---	X1	S5	800	TRIODE SECTION.
6BD7A	6.3	4500-6830	0	27	SH	S1	400	DUAL TRIODE. NOTE 1.
6BJ5	6.3	4310-5720	10	---	X10	S5	500	
6BK8	6.3	4590-6138	11	---	X4	S5	300	
6BL8	6.3	4520-6371	12	---	X4	S5	625	PENTODE SECTION.
6BL8	6.3	4590-1086	26	---	X4	S5	675	TRIODE SECTION.
6BM8	6.3	4530-6720	26	---	X4	S5	625	PENTODE SECTION.
6BM8	6.3	4510-9080	0	---	X2	S5	775	TRIODE SECTION.
6BN5	6.3	4520-7938	24	---	X4	S5	450	
6BR3	6.3	4500-9000	0	76	SH	S3	400	CONNECT CAP TO EXT. SELF BIAS RES. JACKS MODEL 752A# CAP=K
6BR5	6.3	4510-9020	---	100	SH	S6	----	CONNECT A 1 MEGOHM RESISTOR FROM PLATE JACK TO OCTAL TEST SOCKET PIN 7. VARY BIAS TO VARY BEAM ANGLE.
6BR7	6.3	4520-7839	20	---	X2	S5	375	
6BS7	6.3	4500-7839	20	---	X2	S5	375	CAP = G.



TUBE TYPE	FIL.	SELECTORS	BIAS	SHUNT	MULT	PRESS	MIN. MUT. COND	NOTATIONS
6BT4	6.3	8100-2670	0	0	SH	S3	650	DUAL DIODE. USE ADAPTER SA-5, 1050-129. NOTE 1.
6BW6	6.3	4520-7839	18	---	X4	S5	575	
6BY7	6.3	4520-7819	17	---	X4	S5	550	
6C12	6.3	5420-6137	15	---	X2	S5	475	HEPTODE SECTION.
6C12	6.3	5490-8032	20	---	X4	S5	475	TRIODE SECTION.
6C18	6.3	4570-3280	12	---	X10	S5	450	PENTODE SECTION.
6C18	6.3	4590-1080	31	---	X10	S5	375	TRIODE SECTION.
6CA4	6.3	5400-7130	0	42	SH	S3	650	DUAL DIODE. NOTE 1
6CD7	6.3	7240-5080	---	100	SH	S6	----	CONNECT A 1 MEGOHM RESISTOR FROM PLATE JACK TO PIN 3 OF LARGE 7 PIN SOCKET. CONNECT A SECOND 1 MEGOHM RESISTOR FROM PLATE JACK TO PIN 6 OF LARGE 7 PIN SOCKET. EYE ONE CLOSSES AT BIAS OF ABOUT 35. EYE TWO CLOSSES AT BIAS OF ABOUT 68. BIAS = VARY.
6CF8	6.3	4590-6138	11	---	X4	S5	300	
6CH6	6.3	4520-7839	0	---	X10	S5	600	
6CJ5	6.3	1860-2570	21	---	X2	S5	475	USE ADAPTER SA-5, 1050-129.
6CK5	6.3	1860-2570	10	---	X10	S5	600	USE ADAPTER SA-5, 1050-129.
6CM4	6.3	4520-1030	14	---	X10	S5	875	
6CM5	6.3	7250-0480	32	---	X10	S5	450	CAP = P.
6CN6	6.3	7250-0481	0	---	X10	S5	700	CAP = P.
6CQ6	6.3	4310-5726	15	---	X4	S5	225	
6CT7	6.3	1860-2574	25	---	X2	S5	750	PENTODE SECTION. (SEE BELOW).
6CT7	6.3	1800-3070	0	61	SH	S1	400	DIODE SECT. USE ADAPTER SA-5, 1050-129.
6CU7	6.3	1860-2574	19	---	X2	S5	400	HEXODE SECTION. (SEE BELOW).
6CU7	6.3	1840-3076	27	---	X2	S5	475	TRIODE SECT. USE ADAPTER SA-5, 1050-129.
6CV7	6.3	1830-2070	9	---	X1	S5	800	TRIODE SECTION. (SEE BELOW).
6CV7	6.3	1800-6570	0	27	SH	S1	400	DUAL DIODE. USE ADAPTER SA-5, 1050-129. NOTE 1.
6CW5	6.3	4520-7930	16	---	X10	S5	475	
6CW7	6.3	4562-9371	24	---	X10	S5	375	DUAL TRIODE. NOTE 1.
6DA5	6.3	4510-9020	---	100	SH	S6	----	CONNECT A 1 MEGOHM RESISTOR FROM PLATE JACK TO OCTAL TEST SOCKET PIN 7. VARY BIAS TO VARY BEAM ANGLE.
6DC8	6.3	4520-6139	14	---	X4	S5	450	PENTODE SECTION.
6DC8	6.3	4500-8730	0	60	SH	S1	400	DUAL DIODE. NOTE 1.
6DG7	6.3	4520-7839	0	---	X4	S5	500	
6DJ8	6.3	5472-6183	20	---	X10	S5	775	DUAL TRIODE. NOTE 1.
6DL4	6.3	4590-8020	14	---	X20	S5	475	
6DL5	6.3	4310-5620	10	---	X4	S5	600	
6DR8	6.3	4520-1639	0	44	SH	S1	650	PENTODE SECTION.
6DR8	6.3	4500-8730	0	43	SH	S1	400	DUAL DIODE. NOTE 1.
6DS8	6.3	4570-1632	23	---	X1	S1	600	HEPTODE SECTION. MAKE NO GAS TEST.
6DS8	6.3	4590-8030	7	---	X2	S1	300	TRIODE SECTION. MAKE NO GAS TEST.
6DX8	6.3	4580-6970	10	---	X10	S5	625	PENTODE SECTION.
6DX8	6.3	4510-2030	12	---	X4	S5	625	TRIODE SECTION.
6EC4	6.3	4500-7010	0	80	SH	S3	350	CONNECT CAP TO PIN 1 OF OCTAL SOCKET. USE ADAPTER SA-8, 1050-168.
6ED4	6.3	4500-8010	0	65	SH	S1	500	CAP = G. USE ADAPTER SA-8, 1050-168.
6ES6	6.3	4370-6523	0	---	X1	S1	500	MAKE NO GAS TEST.
6ET6	6.3	4310-6527	0	73	SH	S1	650	
6F12	6.3	4310-5726	11	---	X10	S5	300	
6F13	6.3	1860-2574	11	---	X10	S5	475	USE ADAPTER SA-5, 1050-129.
6F14	6.3	1860-2574	10	---	X10	S5	425	USE ADAPTER SA-5, 1050-129.
6F16	6.3	1860-2570	21	---	X2	S5	475	USE ADAPTER SA-5, 1050-129.
6F17	6.3	8160-2570	21	---	X2	S5	475	USE HICKOK ADAPTER SA-5, 1050-129
6F19	6.3	4520-7819	17	---	X4	S5	550	
6F21	6.3	4310-5726	15	---	X4	S5	225	
6F22	6.3	5490-6138	11	---	X4	S5	300	
6F26	6.3	5420-7819	17	---	X4	S5	550	
6F29	6.3	5420-7819	17	---	X4	S5	650	
6F30	6.3	5420-7819	10	---	X10	S5	500	
6F33	6.3	3410-5726	13	---	X2	S5	650	

TUBE TYPE	FIL.	SELECTORS	BIAS	SHUNT	MULT	PRESS	MIN. MUT. COND	NOTATIONS
6FC7	6.3	4562-9381	22	---	X10	S5	550	DUAL TRIODE. NOTE 1.
6FG6	6.3	4510-6030	45	---	X20	S5	----	SOLID BAR. (SEE BELOW).
6FG6	6.3	4510-6030	0	---	X20	S5	----	SPLIT BAR. JUMPER NOVAL SOCKET PINS 7&9. CONNECT A 470K OHM, 1/2 WATT, 10% RESISTOR FROM THIS JUMPER TO PIN 6.
6FY5	6.3	4320-5016	13	---	X10	S5	800	
6G-A4	6.3	2710-3080	31	---	X10	S5	625	
6G-B3	6.3	2750-0480	35	---	X4	S5	725	CAP=P
6GR5	6.3	4520-0780	73	---	X4	S5	400	CAP = P. USE ADAPTER SA-8, 1050-168.
6G-B8	6.3	7250-3480	25	---	X10	S5	550	
6GJ7	6.3	5420-6710	10	---	X10	S5	475	PENTODE SECTION.
6GJ7	6.3	5490-8030	29	---	X10	S5	550	TRIODE SECTION.
6GM8	6.3	4572-6183	19	0	SH	S1	875	DUAL TRIODE. MAKE NO GAS TEST.
6GS7	6.3	4590-6780	10	---	X10	S5	500	PENTODE SECTION.
6GS7	6.3	4510-2030	33	---	X10	S5	300	TRIODE SECTION
6GV7	6.3	4570-3280	12	---	X10	S5	450	PENTODE SECTION.
6GV7	6.3	4590-1080	31	---	X10	S5	375	TRIODE SECTION.
6GV8	6.3	4590-6780	36	---	X10	S5	375	PENTODE SECTION.
6GV8	6.3	4520-1030	23	---	X2	S5	950	TRIODE SECTION.
6GW8	6.3	4580-6370	11	---	X10	S5	500	PENTODE SECTION.
6GW8	6.3	4510-9020	10	---	X2	S5	325	TRIODE SECTION.
6GX8	6.3	4580-7693	45	---	X20	S4	----	SOLID BAR.
6GX8	6.3	4580-7693	78	---	X20	S4	----	SPLIT BAR.
6GX8	6.3	4500-2030	0	20	SH	S1	400	DIODE.
6HA5	6.3	4310-5076	17	---	X10	S5	475	
6H-B25	6.3	4520-0798	45	---	X10	S5	350	CAP=P. USE ADAPTER SA-8, 1050-168.
6HG8	6.3	4520-8930	11	---	X10	S5	525	PENTODE SECTION.
6HG8	6.3	4560-7030	33	---	X10	S5	375	TRIODE SECTION.
6HK8	6.3	4572-6183	15	---	X20	S5	450	DUAL TRIODE. NOTE 1.
6HU6	6.3	4510-6030	34	---	X20	S5	----	SOLID BAR. (SEE BELOW).
6HU6	6.3	4510-6030	0	---	X20	S5	----	SPLIT BAR. JUMPER NOVAL SOCKET PINS 7&9. CONNECT A 470 K OHM, 1/2 WATT, 10% RESISTOR FROM THIS JUMPER TO PIN 6.
6HU8	6.3	4520-3170	14	---	X4	S5	770	PENTODE NO. 1.
6HU8	6.3	4560-8970	14	---	X4	S5	770	PENTODE NO. 2.
6JV6	6.3	1CR0-732A	60	---	X10	S5	325	MODEL 752# NOTE 7.
6JW8	6.3	4520-6370	14	---	X4	S5	775	PENTODE SECTION.
6JW8	6.3	4590-1080	13	---	X4	S5	550	TRIODE SECTION.
6JX8	6.3	4520-6731	12	---	X1	--	730	HEPTODE SECT. HOLD DOWN S1 & PRESS S5.
6JX8	6.3	4590-8030	11	---	X4	S4	400	TRIODE SECTION.
6KG6	6.3	4510-0392	90	---	X10	S5	475	CAP = P. USE ADAPTER SA-8, 1050-168.
6KH8	6.3	4526-3970	15	---	X4	S5	775	PENTODE NO. 1.
6KH8	6.3	4562-8970	15	---	X4	S5	775	PENTODE NO. 2.
6KH8	6.3	4526-1070	0	---	X1	S5	100	TRIODE SECTION.
6KN8	6.3	4572-6183	18	---	X20	S5	450	DUAL TRIODE. NOTE 1.
6KW6	6.3	4510-6370	40	---	X10	S5	475	USE ADAPTER SA-8, 1050-168.
6L12	6.3	5472-6183	14	---	X4	S5	625	DUAL TRIODE. NOTE 1.
6L13	6.3	4572-6183	14	---	X4	S5	200	DUAL TRIODE. NOTE 1.
6L34	6.3	4310-7050	0	---	X10	S5	525	
6LD3	6.3	1830-2070	9	---	X1	S5	800	TRIODE SECT. USE ADAPTER SA-5, 1050-129.
6LD3	6.3	1800-6570	0	27	SH	S1	400	DUAL DIODE. USE ADAPTER SA-5, 1050-129.
6LD12	6.3	5480-9070	15	---	X4	S5	175	TRIODE SECTION.
6LD12	6.3	5400-6070	0	35	SH	S1	400	DIODE NO. 1.
6LD12	6.3	5400-2137	0	78	SH	S1	400	DUAL DIODE. NOTE 1.
6LD13	6.3	5420-1030	9	---	X1	S5	800	TRIODE SECTION.
6LD13	6.3	5400-8630	0	27	SH	S1	400	DUAL DIODE. NOTE 1.
6LF6	6.3	1050-0342	77	---	X4	S5	750	CAP=P. NOTE 7.
6LN8	6.3	4520-6371	12	---	X4	S5	625	PENTODE SECTION.
6LN8	6.3	4590-1086	26	---	X4	S5	675	TRIODE SECTION.
6LV6	6.3	1050-0342	77	---	X4	S5	625	CAP=P. MODEL 752# NOTE 7.
6LX8	6.3	4520-6370	14	---	X4	S5	775	PENTODE SECTION.
6LX8	6.3	4590-1080	13	---	X4	S5	550	TRIODE SECTION.
6M5	6.3	4520-7130	10	---	X10	S5	600	
6MG8	6.3	4520-6370	10	---	X10	S5	325	PENTODE SECTION.
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TUBE TYPE	FIL.	SELECTORS	BIAS	SHUNT	MULT	PRESS	MIN. MUT. COND	NOTATIONS
8LS6	7.5	4520-7813	16	---	X4	S5	790	PENTODE SECTION. USE ADAPTER SA-11, 1050-177. MODEL 752# USE SA-11 & CA-4. NOTE 7.
8U9	7.5	5630-7824	14	---	X10	S5	375	
8U9	7.5	56A0-9010	30	---	X10	S5	300	TRIODE SECTION.
8X9	7.5	5630-7824	15	---	X10	S5	375	PENTODE SECTION. USE ADAPTER SA-11, 1050-177. MODEL 752# USE SA-11 & CA-4. NOTE 7.
8X9	7.5	56A0-9010	14	---	X4	S5	750	TRIODE SECTION.
9A8	10.0	4520-6371	12	---	X4	S5	625	PENTODE SECTION.
9A8	10.0	4590-1086	26	---	X4	S5	675	TRIODE SECTION.
9AB4	10.0	4360-1070	14	---	X4	S5	625	TRIODE SECTION.
9AK8	10.0	4580-9070	15	---	X4	S5	175	
9AK8	10.0	4500-6070	0	35	SH	S1	400	DIODE NO. 1.
9AK8	10.0	4500-2137	0	78	SH	S1	400	DUAL DIODE. NOTE 1.
9AQ8	10.0	4572-6183	14	---	X4	S5	625	DUAL TRIODE. NOTE 1.
9BR8	10.0	4590-6780	12	---	X4	S5	475	PENTODE SECTION.
9BR8	10.0	4510-2030	10	---	X10	S5	525	TRIODE SECTION.
9BW6	10.0	4520-7839	18	---	X4	S5	575	PENTODE SECTION.
9CG8	10.0	4590-6780	10	---	X4	S5	725	
9CG8	10.0	4510-2030	15	---	X10	S5	350	TRIODE SECTION.
9D6	6.3	4310-5726	15	---	X4	S5	225	CAP = G. USE ADAPTER SA-8, 1050-168.
9ED4	7.5	4500-8010	0	65	SH	S1	500	
9GH8A	10.0	4520-6370	11	---	X4	S5	625	PENTODE SECTION.
9GH8A	10.0	4590-1080	13	---	X10	S5	525	TRIODE SECTION.
9GV8	10.0	4590-6780	36	---	X10	S5	380	PENTODE SECTION.
9GV8	10.0	4520-1030	23	---	X2	S5	960	TRIODE SECTION.
9J6	10.0	4356-2170	17	---	X10	S5	325	DUAL TRIODE. NOTE 1
9JW8	10.0	4520-6370	14	---	X4	S5	775	PENTODE SECTION.
9JW8	10.0	4590-1080	13	---	X4	S5	550	TRIODE SECTION.
9V9	10.0	5630-7412	15	---	X1	--	700	HEPTODE SECTION. HOLD DOWN S1 & PRESS S5 USE ADAPTER SA-11, 1050-177. MODEL 752# USE SA-11 & CA-4. NOTE 7.
9V9	10.0	5680-A090	23	---	X4	S5	650	TRIODE SECTION.
10C14	20.0	5420-6137	15	---	X2	S5	475	HEPTODE SECTION.
10C14	20.0	5490-8032	20	---	X4	S5	475	TRIODE SECTION.
10CW5	10.0	4520-7930	16	---	X10	S5	475	DUAL DIODE. NOTE 1.
10D2	20.0	4300-7215	0	78	SH	S1	400	
10DX8	10.0	4580-6970	10	---	X10	S5	625	PENTODE SECTION.
10DX8	10.0	4510-2030	12	---	X4	S5	625	TRIODE SECTION.
10FD12	20.0	5420-6139	14	---	X4	S5	450	PENTODE SECTION.
10FD12	20.0	5400-8730	0	60	SH	S1	400	DUAL DIODE. NOTE 1.
10GV8	10.0	4590-6780	36	---	X10	S5	375	PENTODE SECTION.
10GV8	10.0	4520-1030	23	---	X2	S5	950	TRIODE SECTION.
10LD3	12.6	8130-2070	9	---	X1	S5	800	TRIODE SECT. USE ADAPTER SA-5, 1050-129.
10LD3	12.6	8100-6570	0	27	SH	S1	400	DUAL DIODE. NOTE 1.
10LD12	25.0	5480-9070	15	---	X4	S5	175	TRIODE SECTION.
10LD12	25.0	5400-6070	0	35	SH	S1	400	DIODE NO. 1.
10LD12	25.0	5400-2137	0	78	SH	S1	400	DUAL DIODE. NOTE 1.
10LD13	12.6	5420-1030	9	---	X1	S5	800	TRIODE SECTION.
10LD13	12.6	5400-8630	0	27	SH	S1	400	DUAL DIODE. NOTE 1.
10LD14	25.0	5472-6183	14	---	X4	S5	625	DUAL TRIODE. NOTE 1.
10P18	50.0	5420-7930	16	---	X10	S5	475	PENTODE SECTION.
10PL12	50.0	5430-6720	26	---	X4	S5	625	
10PL12	50.0	5410-9080	0	---	X2	S5	775	TRIODE SECTION.
11AF9	12.6	5680-A970	16	---	X10	S5	650	PENTODE NO. 1. USE ADAPTER SA-11, 1050-177. MODEL 752# NOTE 7.
11AF9	12.6	5610-4320	12	---	X10	S5	450	PENTODE NO. 2.
11BM8	10.0	4530-6720	26	---	X4	S5	625	PENTODE SECTION.
11BM8	10.0	4510-9080	0	---	X2	S5	775	TRIODE SECTION.
11R3	10.0	4500-0090	0	50	SH	--	650	CAP=P. SHORT ON 1-2-3-4. HOLD DOWN S7 AND PRESS S3.
11Y9	10.0	5680-A970	16	---	X10	S5	650	PENTODE NO. 1. USE ADAPTER SA-11, 1050-177. MODEL 752# USE SA-11 & CA-4. NOTE 7.

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TUBE TYPE	FIL.	SELECTORS	BIAS	SHUNT	MULT	PRESS	MIN. MUT. COND	NOTATIONS
6MG8	6.3	4540-1080	10	---	X10	S5	525	TRIODE SECTION.
6M-HH3	6.3	3465-1270	16	---	X10	S5	550	DUAL TRIODE. NOTE 1.
6N3	6.3	4500-9030	0	50	SH	S3	525	
6N-H10	6.3	3140-2080	20	59	SH	S5	1700	USE ADAPTER SA-3, 1050-127 OR CA-4, 1050-135. NOTE 7.
6N-L7	6.3	3140-2080	47	---	X1	S5	570	USE ADAPTER SA-3, 1050-127 OR CA-4, 1050-135. NOTE 7.
6PL12	6.3	5430-6720	26	---	X4	S5	625	PENTODE SECTION.
6PL12	6.3	5410-9080	0	---	X2	S5	775	TRIODE SECTION.
6R3	6.3	4500-0090	0	50	SH	--	650	CAP = P. SHORT ON 1-2-3-4. HOLD DOWN S7 AND PRESS S3.
6R-HH2	6.3	4572-6183	15	---	X10	S5	400	DUAL TRIODE. NOTE 1.
6R-HH8	6.3	4572-6183	18	---	X20	S5	450	DUAL TRIODE. NOTE 1.
6R-K19	6.3	4500-9000	0	76	SH	S3	400	CONNECT CAP TO EXT. SELF BIAS RES. JACKS MODEL 752A# CAP=K
6R-P15	6.3	4510-7930	10	---	X10	S5	500	
6R-P22	6.3	4520-6317	10	---	X4	S5	475	
6S2,A	6.3	4200-0000	0	85	SH	S6	400	CAP = P.
6U9	6.3	5630-7824	14	---	X10	S5	375	PENTODE SECTION. USE ADAPTER SA-11, 1050-177. MODEL 752# USE SA-11 & CA-4. NOTE 7.
6U9	6.3	56A0-9010	30	---	X10	S5	300	TRIODE SECTION.
6V9	6.3	5630-7412	15	---	X1	--	700	HEPTODE SECTION. HOLD DOWN S1 AND PRESS S5. USE ADAPTER SA-11, 1050-177. MODEL 752# USE SA-11 & CA-4. NOTE 7.
6V9	6.3	5680-A090	23	---	X4	S5	650	TRIODE SECTION.
6X6	6.3	2753-4086	100	100	SH	S6	----	EYES OPEN.
6X6	6.3	2750-4386	100	100	SH	S6	----	EYES CLOSED.
6X9	6.3	5630-7824	15	---	X10	S5	375	PENTODE SECTION. USE ADAPTER SA-11, 1050-177. MODEL 752# USE SA-11 & CA-4. NOTE 7.
6X9	6.3	56A0-9010	14	---	X4	S5	750	TRIODE SECTION.
6Y9	6.3	5680-A970	16	---	X10	S5	650	PENTODE NO. 1. USE ADAPTER SA-11, 1050-177. MODEL 752# USE SA-11 & CA-4. NOTE 7.
6Y9	6.3	5610-4320	12	---	X10	S5	450	PENTODE NO. 2.
7AN7	7.5	4562-9371	24	---	X10	S5	375	DUAL TRIODE. NOTE 1.
7D9	6.3	4310-5720	26	---	X4	S5	400	
7ES8	7.5	4572-6183	22	---	X10	S5	475	DUAL TRIODE. NOTE 1.
7F16	6.3	8160-2570	21	---	X2	S5	475	USE ADAPTER SA-5, 1050-129.
7FC7	7.5	4562-9381	22	---	X10	S5	550	DUAL TRIODE. NOTE 1.
7GS7	7.5	4590-6780	10	---	X10	S5	500	PENTODE SECTION.
7GS7	7.5	4510-2030	33	---	X10	S5	300	TRIODE SECTION.
7GV7	7.5	4570-3280	12	---	X10	S5	450	PENTODE SECTION.
7GV7	7.5	4590-1080	31	---	X10	S5	375	TRIODE SECTION.
7HG8	7.5	4520-8930	11	---	X10	S5	525	PENTODE SECTION.
7HG8	7.5	4560-7030	33	---	X10	S5	380	TRIODE SECTION.
8A8	10.0	4520-6371	12	---	X4	S5	625	PENTODE SECTION.
8A8	10.0	4590-1086	26	---	X4	S5	675	TRIODE SECTION.
8AV11	7.5	1C97-A546	23	---	X2	S5	750	DUAL TRIODE. NOTE 1.
8AV11	7.5	1C80-2030	23	---	X2	S5	750	TRIODE NO. 3. MODEL 752# NOTE 7.
8B8	7.5	4530-6720	26	---	X4	S5	625	PENTODE SECTION.
8B8	7.5	4510-9080	0	---	X2	S5	775	TRIODE SECTION.
8CW5	7.5	4520-7930	16	---	X10	S5	475	
8D3	6.3	4310-5726	11	---	X10	S5	300	
8D5	6.3	4520-7839	20	---	X2	S5	375	
8D6	6.3	5420-7819	10	---	X10	S5	400	
8D7	6.3	4500-7839	20	---	X2	S5	375	CAP = G.
8D8	6.3	5490-6138	11	---	X4	S5	300	
8DX8	7.5	4580-6970	10	---	X10	S5	630	PENTODE SECTION.
8DX8	7.5	4510-2030	12	---	X4	S5	400	TRIODE SECTION.
8GJ7	7.5	5420-6710	10	---	X10	S5	475	PENTODE SECTION.
8GJ7	7.5	5490-8030	29	---	X10	S5	550	TRIODE SECTION.
8K11	7.5	1C90-A048	25	---	X2	S5	675	TRIODE NO. 1.
8K11	7.5	1C7B-5263	14	---	X4	S5	200	DUAL TRIODE. NOTE 1.

TUBE TYPE	FIL.	SELECTORS	BIAS	SHUNT	MULT	PRESS	MIN. MUT. COND	NOTATIONS
11Y9	10.0	5610-4320	12	---	X10	S5	450	PENTODE NO. 2.
12AC5	12.6	1860-2570	21	---	X2	S5	475	USE ADAPTER SA-5, 1050-129.
12AJ7	12.6	4520-6137	15	---	X2	S5	475	HEPTODE SECTION.
12AJ7	12.6	4590-8032	20	---	X4	S5	475	TRIODE SECTION.
12B-B14	12.6	4510-0630	59	---	X4	S5	250	CAP = P. USE SA-8, 1050-168.
12BR3	12.6	4500-9000	0	76	SH	S3	400	CONNECT CAP TO EXT. SELF BIAS RES. JACKS
12H-B25	12.6	4520-0798	45	---	X10	S5	350	CAP=P. USE ADAPTER SA-8, 1050-168.
12R-K19	12.6	4500-9000	0	76	SH	S3	400	CONNECT CAP TO EXT. SELF BIAS RES. JACKS MODEL 752# CAP=K
12BX6	12.6	4520-7819	10	---	X10	S5	400	
12DA6	12.6	4520-7839	12	---	X4	S5	475	
12DW4A	12.6	4500-2090	0	55	SH	S3	650	USE ADAPTER SA-4, 1050-144 OR CA-4, 1050-135. FOR MODEL 752A# SAME AS ABOVE NO ADAPTER REQUIRED.
12FQ7	12.6	4572-6183	23	---	X4	S5	400	DUAL TRIODE. NOTE 1.
12GB3	12.6	2750-0480	35	---	X4	S5	725	CAP = P.
12G-K17	12.6	7800-5030	0	50	SH	S3	650	
12HU8	12.6	4520-3170	14	---	X4	S5	770	PENTODE NO. 1.
12HU8	12.6	4560-8970	14	---	X4	S5	770	PENTODE NO. 2.
12S7	12.6	8160-2574	25	---	X2	S5	375	PENT. SECT. USE ADAPTER SA-5, 1050-129.
12S7	12.6	8100-3070	0	61	SH	S1	400	DIODE SECTION.
13CM5	12.6	7250-0480	32	---	X10	S5	450	CAP = P.
13D1	25.0	7841-5263	23	---	X4	S5	400	DUAL TRIODE. NOTE 1.
13D2	6.3	7841-5263	23	---	X4	S5	400	DUAL TRIODE. NOTE 1.
13GB5	12.6	4520-0780	73	---	X4	S5	400	CAP = P. USE ADAPTER SA-8, 1050-168.
14GW8	12.6	4580-6370	11	---	X10	S5	500	PENTODE SECTION.
14GW8	12.6	4510-9020	10	---	X2	S5	325	TRIODE SECTION.
14K7	12.6	1860-2574	19	---	X2	S5	400	HEPTODE SECTION. (SEE BELOW).
14K7	12.6	1840-3076	27	---	X2	S5	475	TRIODE SECTION.
14J7	12.6	1830-2070	9	---	X1	S5	800	USE ADAPTER SA-5, 1050-129. TRIODE SECTION. (SEE BELOW).
14L7	12.6	1800-6570	0	27	SH	S1	400	DUAL DIODE. NOTE 1.
15CW5	17.0	4520-7930	30	---	X10	S5	475	USE ADAPTER SA-5, 1050-129.
15DQ8	17.0	4580-6970	10	---	X10	S5	630	HOLD DOWN 'LIFE TEST' BUTTON.
15DQ8	17.0	4510-2030	12	---	X4	S5	630	PENTODE SECTION.
16A5	17.0	4520-7930	23	---	X10	S5	350	TRIODE SECTION.
16A8	17.0	4530-6720	26	---	X4	S5	625	PENTODE SECTION.
16A8	17.0	4510-9080	0	---	X2	S5	775	TRIODE SECTION.
16AQ3	17.0	4500-9000	0	56	SH	S3	800	CONNECT CAP TO EXT. SELF BIAS RES. JACKS MODEL 752# CAP=K.
16JV6	17.0	1CB0-732A	60	---	X10	S5	325	17.0 1CB0-72A0 59 --- X4 S5 MODEL 752# NOTE 7.
16JV6	MODEL	752# NOTE						
16LU8A	17.0	1C60-4890	40	---	X10	S5	350	PENTODE SECT. MODEL 752# USE CA-4 NOTE 7
16LU8A	17.0	1CA0-2080	21	---	X4	S5	350	TRIODE SECTION
16Y9	17.0	5680-A970	16	---	X10	S5	650	PENTODE NO. 1. USE ADAPTER SA-11, 1050-177. MODEL 752# USE SA-11 & CA-4. NOTE 7.
16Y9	17.0	5610-4320	12	---	X10	S5	450	PENTODE NO. 2.
17A8	17.0	4520-6370	12	---	X4	S5	625	PENTODE SECTION.
17A8	17.0	4590-1080	26	---	X4	S5	675	TRIODE SECTION.
17AB9	17.0	5690-78A0	16	---	X10	S5	375	TETRODE NO. 1. USE ADAPTER SA-11, 1050-177. MODEL 752# USE SA-11 & CA-4. NOTE 7.
17AB9	17.0	5630-1240	16	---	X10	S5	375	TETRODE NO. 2.
17B-B14	17.0	4510-0630	59	---	X4	S5	250	CAP = P. USE ADAPTER SA-8, 1050-168.
17BR3	17.0	4500-9000	0	76	SH	S3	400	CONNECT CAP TO EXT. SELF BIAS RES. JACKS MODEL 752A# CAP=K
17C8	17.0	4520-6139	8	---	X4	--	350	PENTODE SECTION. HOLD DOWN S1 & PRESS S5
17C8	17.0	4500-7839	0	30	SH	S1	400	DUAL DIODE. NOTE 1.
17DW4A	17.0	4500-2090	0	55	SH	S3	650	USE ADAPTER SA-4, 1050-144 OR ADAPTER CA-4, 1050-135. FOR MODEL 752A# SAME AS ABOVE - NO ADAPTER REQUIRED.

TUBE TYPE	FIL.	SELECTORS	BIAS	SHUNT	MULT	PRESS	MIN. MUT. COND	NOTATIONS
17EW8	17.0	4572-6183	14	---	X10	S5	375	DUAL TRIODE. NOTE 1.
17H-B25	17.0	4520-0798	45	---	X10	S5	350	CAP=P. USE ADAPTER SA-8, 1050-168.
17KW6	17.0	4510-6370	40	---	X10	S5	475	USE ADAPTER SA-8, 1050-168.
17R-K19	17.0	4500-9030	0	76	SH	S3	400	CONNECT CAP TO PIN 3 OF OCTAL SOCKET.
17Z3	17.0	4500-0090	0	50	SH	--	650	CAP = P. SHORT ON 1-2-3-4. HOLD DOWN S7 AND PRESS S3.
18GB5	20.0	4520-0780	73	---	X4	S5	400	CAP=P. USE HICKOK ADAPTER SA-8, 1050-168
18GV8	17.0	4590-6780	36	---	X10	S5	380	PENTODE SECTION.
18GV8	17.0	4520-1030	23	---	X2	S5	960	TRIODE SECTION.
18J6	17.0	4356-2170	17	---	X10	S5	325	DUAL TRIODE. NOTE 1.
19AJ8	20.0	4520-6137	15	---	X2	S5	475	HEPTODE SECTION.
19AJ8	20.0	4590-8032	20	---	X4	S5	475	TRIODE SECTION.
19BR5	20.0	4510-9020	---	100	SH	S6	----	CONNECT A 1 MEGOHM RESISTOR FROM PLATE JACK TO OCTAL TEST SOCKET PIN NO. 7. VARY BIAS TO VARY BEAM ANGLE.
19BX6	20.0	4520-7819	10	---	X10	S5	400	
19BY7	20.0	4520-7819	17	---	X4	S5	550	
19D8	20.0	4520-6137	15	---	X2	S5	475	HEPTODE SECTION.
19D8	20.0	4590-8032	20	---	X4	S5	475	TRIODE SECTION.
19EW7	20.0	4570-6080	34	---	X2	S5	650	TRIODE NO. 1.
19EW7	20.0	4520-1090	56	---	X10	S5	475	TRIODE NO. 2.
19FL8	20.0	4520-6139	14	---	X4	S5	450	PENTODE SECTION.
19FL8	20.0	4500-8730	0	60	SH	S1	400	DUAL DIODE. NOTE 1.
19G3	4.3	7200-0000	0	15	SH	S3	800	CAP = P.
19KF6	20.0	4570-9632	34	---	X4	S5	200	USE ADAPTER SA-8, 1050-168.
20A3	6.3	4310-6025	---	93	SH	S6	650	STRIKES AT ABOUT 26. NOTE 6.
20AQ3	20.0	4500-9000	0	56	SH	S3	800	CONNECT CAP TO EXT. SELF BIAS RES. JACKS MODEL 752A# CAP=K
20LF6	20.0	1C50-0324	77	---	X4	S5	750	CAP=P. MODEL 752# NOTE 7.
21KQ6	20.0	4580-0392	30	---	X10	S4	750	CAP = P. USE ADAPTER SA-8, 1050-168.
23JS6A	25.0	1C50-0324	68	---	X4	S5	600	CAP = P. NOTE 7.
25B-B14	25.0	4510-0630	59	---	X4	S5	250	CAP=P. USE ADAPTER SA-8, 1050-168.
25BR3	25.0	4500-9000	0	76	SH	S3	400	CONNECT CAP TO EXT. SELF BIAS RES JACKS MODEL 752A#CAP=K
25E5	25.0	7250-0480	32	---	X10	S5	450	CAP = P.
25H-B25	25.0	4520-0798	45	---	X10	S5	350	CAP=P. USE ADAPTER SA-8, 1050-168.
25HX5	25.0	4570-9630	55	---	X10	S5	350	USE ADAPTER SA-8, 1050-168.
25R-K19	25.0	4500-9030	0	76	SH	S3	400	CONNECT CAP TO PIN 3 OF OCTAL SOCKET.
26AQ8	25.0	4572-6183	14	---	X4	S5	625	DUAL TRIODE. NOTE 1.
27GB5	25.0	4520-0780	73	---	X4	S5	400	CAP = P. USE ADAPTER SA-8, 1050-168.
27KG6	25.0	4510-0392	90	---	X10	S5	475	CAP = P. USE ADAPTER SA-8, 1050-168.
27LF6	25.0	1C50-0324	77	---	X4	S5	750	CAP=P. MODEL 752# NOTE 7.
28AK8	25.0	4580-9070	15	---	X4	S5	175	TRIODE SECTION.
28AK8	25.0	4500-6070	0	35	SH	S1	400	DIODE NO. 1.
28AK8	25.0	4500-2137	0	78	SH	S1	400	DUAL DIODE. NOTE 1.
28EC4	25.0	4500-7010	0	80	SH	S3	350	CONNECT CAP TO PIN 1 OF OCTAL SOCKET. USE ADAPTER SA-8, 1050-168.
29KQ6	25.0	4580-0392	30	---	X10	S4	750	CAP = P. USE ADAPTER SA-8, 1050-168.
30A5	35.0	4950-7610	16	---	X10	S5	475	BEFORE PLACING TUBE IN SOCKET, JUMPER A 33 OHM, 2 WATT RESISTOR BETWEEN PINS 3 AND 9 ON THE 9-PIN MIN. SOCKET COUNTING COUNTER CLOCKWISE.
30AE3	25.0	4500-9000	0	56	SH	S3	400	CONNECT CAP TO EXT. SELF BIAS RES. JACKS MODEL 752A# CAP=K
30C1	10.0	5420-6371	12	---	X4	S5	625	PENTODE SECTION
30C1	10.0	5490-1086	26	---	X4	S5	675	TRIODE SECTION
30L1	7.5	4562-9371	24	---	X10	S5	375	DUAL TRIODE. NOTE 1.
31A3	35.0	1800-2070	0	48	SH	S3	500	ADJ. LINE ADJ. TO 625. USE ADAPTER SA-5, 1050-129.
31AV3	35.0	4500-9030	0	48	SH	S3	500	SET 'LINE ADJUST' AT 625 ON 1500 SCALE.
32A8	35.0	4530-6720	26	---	X4	S5	625	PENTODE SECTION
32A8	35.0	4510-9080	0	---	X2	S5	775	TRIODE SECTION.
34R3	35.0	4500-0090	0	50	SH	--	650	CAP = P. SHORT ON 1-2-3-4. HOLD DOWN S7 AND PRESS S3.



TUBE TYPE	FIL.	SELECTORS	BIAS	SHUNT	MULT	PRESS	MIN. MUT. C(IN)	NOTATIONS
1619	2.5	7250-3408	12	---	X4	S5	525	NOTE 2.
1620	6.3	7200-3485	21	---	X2	S5	375	CAP = G.
1621	6.3	7250-3480	23	---	X2	S5	625	
1622	6.3	7250-3480	17	---	X10	S5	300	
1623	6.3	4130-0000	0	---	X2	S5	675	CAP = P.
1624	6.3	5130-0200	0	---	X4	S5	550	CAP = P.
1625	6.3	7140-0360	28	---	X4	S5	600	CAP = P.
1626	6.3	7250-3080	46	---	X2	S5	650	
1629	6.3	7250-4080	0	100	SH	S5	----	EYE OPEN.
1629	6.3	7250-4380	0	100	SH	S5	----	EYE CLOSED.
1631	12.6	7250-3481	17	---	X10	S5	300	
1632	12.6	7250-3480	25	---	X10	---	375	HOLD DOWN S1 AND PRESS S5.
1633	25.0	7841-5263	23	---	X4	S5	400	DUAL TRIODE. NOTE 1.
1634	12.6	7843-5261	12	---	X4	S5	200	DUAL TRIODE. NOTE 1.
1635	6.3	7245-3680	0	---	X2	S5	250	DUAL TRIODE. NOTE 1.
1641	5.0	4100-0000	0	28	SH	S3	650	LEFT CAP = P.
1641	5.0	1400-0000	0	28	SH	S3	650	RIGHT CAP = P.
1642	6.3	7104-3526	35	---	X2	S5	425	DUAL TRIODE. CAP = G. NOTE 1.
1644	12.6	7610-8523	0	---	X2	S5	525	PENTODE NO. 1.
1644	12.6	7630-4521	0	---	X2	S5	525	PENTODE NO. 2.
1650	6.3	6140-3070	24	---	X2	S5	600	
1654	1.4	1700-0000	0	67	SH	S6	650	CAP = P.
1655	6.3	7843-5260	12	---	X4	S5	200	DUAL TRIODE. NOTE 1.
1658	2.0	4130-2000	43	---	X2	S5	275	
1659	2.5	6100-2050	11	---	X4	S5	175	TRIODE SECTION. CAP = G.
1659	2.5	6100-4350	11	32	SH	S1	400	DUAL DIODE. NOTE 1.
1851	6.3	7200-3485	13	---	X10	S5	375	CAP = G.
1852	6.3	7240-8653	13	---	X10	S5	375	
1853	6.3	7240-8653	0	---	X4	S5	625	
5516	6.3	7250-0310	0	---	X4	S5	625	CAP = P. SHORT ON 1-2.
5517	OFF	0000-4070	0	40	SH	S2	650	CAP = P.
5556	4.3	4130-2000	26	---	X2	S5	300	
5591	6.3	4310-5620	10	---	X4	S5	675	
5603	6.3	2740-8623	42	---	X4	S5	625	
5608A	2.5	7153-6240	17	---	X2	S5	475	DUAL TRIODE. NOTE 1.
5610	6.3	4360-1020	27	---	X4	S5	625	
5618	6.3	1760-2340	0	---	X4	S5	475	NOTE 2.
5633	6.3	4630-0512	12	---	X4	S5	375	TOP LEAD = P.
5634	6.3	4630-0512	12	---	X10	S5	225	TOP LEAD = P.
5635	6.3	3612-7584	12	---	X4	S5	600	DUAL TRIODE. NOTE 1.
5637	6.3	3420-1050	10	---	X4	S4	425	
5638	6.3	4630-1520	22	---	X4	S5	300	
5639	6.3	3610-5720	15	---	X10	S5	350	
5640	6.3	3610-5780	44	---	X10	S5	300	
5641	6.3	3600-2050	0	0	SH	S3	650	
5645	6.3	5340-1020	25	---	X4	S5	425	
5646	6.3	5340-1020	9	---	X4	S4	225	
5647	6.3	2300-1040	0	80	SH	S1	400	
5656	6.3	4523-8197	11	---	X10	S5	375	TETRODE NO. 1
5656	6.3	4532-7198	11	---	X10	S5	375	TETRODE NO. 2.
5659	12.6	7250-3480	18	---	X4	S5	475	
5660	12.6	7200-3680	22	---	X2	S5	300	PENTODE SECTION. CAP = G.
5660	12.6	7200-5483	22	32	SH	S1	400	DUAL DIODE. NOTE 1.
5661	12.6	7240-8653	10	---	X4	S5	300	
5662	6.3	4310-7050	---	94	SH	S6	650	STRIKES AT ABOUT 20. NOTE 6.
5663	6.3	4310-7520	---	48	SH	S3	650	STRIKES AT ABOUT 75. NOTE 6.
5679	6.3	8100-6372	0	72	SH	S1	400	DUAL DIODE. NOTE 1.
5690	6.3	7600-5083	0	50	SH	S3	650	UNIT NO. 1.
5690	6.3	2100-3045	0	50	SH	S3	650	UNIT NO. 2.
5691	6.3	7841-5263	13	---	X4	S5	250	DUAL TRIODE. NOTE 1.
5692	6.3	7841-5263	23	---	X4	S5	350	DUAL TRIODE. NOTE 1.
5693	6.3	7240-8653	18	---	X4	S5	250	
5694	6.3	7245-3618	0	---	X2	S5	625	DUAL TRIODE. NOTE 1.

TUBE TYPE	FIL.	SELECTORS	BIAS	SHUNT	MULT	PRESS	MIN. MUT. COND	NOTATIONS
879	2.5	4100-0000	0	88	SH	S6	650	CAP 33P.
SD917A	6.3	3420-1050	10	---	X4	S4	425	TOP LEAD = P.
SN944	6.3	4630-0512	12	---	X4	S5	375	
SN946B	6.3	2300-1040	0	80	SH	S1	400	STRIKES AT ABOUT 78. NOTE 6.
SN947D	6.3	3610-5780	44	---	X10	S5	300	
SN949C	6.3	3670-1052	---	50	SH	S3	650	
950	2.0	5130-2400	45	---	X2	S5	300	
951	2.0	4100-2300	15	---	X1	S5	400	CAP = G.
SN953D	6.3	3610-5720	15	---	X10	S5	350	CAP = P.
954	6.3	6180-0374	23	---	X2	S5	350	
SN954	6.3	4200-1030	0	0	SH	S3	650	CAP = P. TOP LEAD = P. CONNECT FIL. LEADS TO PINS 1 AND 2.
SN954B	6.3	3600-2050	0	0	SH	S3	650	
955	6.3	6140-3070	24	---	X2	S5	600	
956	6.3	6180-0374	13	---	X4	S5	225	
SN956B	1.1	1200-0000	0	---	X1	S3	400	
957	1.4	6140-3000	33	---	X2	S5	200	CAP = P. HOLD DOWN S1 AND PRESS S5.
SN957A	6.3	5340-1020	25	---	X4	S5	425	
958	1.4	6140-3000	39	---	X2	S5	375	
959	1.4	6180-0300	20	---	X2	--	175	
SN972D	6.3	3610-5740	13	---	X4	S5	475	
SN973B	6.3	3610-5740	16	---	X4	S5	475	
SN976C	6.3	3610-5780	44	---	X10	S5	300	
SD993C	6.3	3610-8050	19	---	X10	S5	300	
SD995B	6.3	3610-5740	13	---	X4	S5	475	GRID NO. 1. GRID NO. 2.
FM1000	6.3	8120-4536	0	---	X2	S5	225	
FM1000	6.3	8160-4532	0	---	X2	S5	275	PLATE NO. 1. PLATE NO. 2.
1005	6.3	6800-3050	0	93	SH	S6	650	
1005	6.3	6800-5030	0	93	SH	S6	650	CAP = P.
SN1006	6.3	5340-1200	9	---	X4	S4	225	
CK1027	OFF	0000-4070	0	91	SH	S6	650	CAP = P.
CK1042	OFF	0000-1050	0	0	SH	S2	650	
E1148	6.3	7200-0080	12	---	X4	S5	350	UPPER CAP = P. LOWER CAP = G.
1201	6.3	8210-3040	18	---	X4	S5	475	
1203	6.3	8100-4070	0	70	SH	S1	400	DUAL TRIODE. NOTE 1.
1204	6.3	7250-3140	10	---	X4	S5	250	
1216	6.3	4356-2170	24	---	X4	S5	525	
1229	2.0	4100-2300	20	---	X2	--	200	CAP = G. HOLD DOWN S1 AND PRESS S5.
1230	2.0	4130-2000	43	---	X2	S5	275	
1231	6.3	8160-2374	10	---	X10	S5	250	DUAL DIODE. NOTE 1.
1232	6.3	8160-2374	11	---	X10	S5	250	
1237	2.5	7200-3600	0	70	SH	S3	650	
1247	0.6	4500-0000	0	0	SH	S1	400	TOP LEAD = P. CAP = P. SHORT ON 1-2.
HY1269	12.6	5130-0240	0	---	X10	S5	275	
1273	6.3	8160-2374	8	---	X4	S5	350	DUAL DIODE. NOTE 1.
1274	6.3	7200-5380	0	20	SH	S3	650	
1280	12.6	8160-2374	8	---	X4	S5	350	TRIODE NO. 1. TRIODE NO. 2.
1284	12.6	8160-2374	23	---	X2	S5	625	
1285	25.0	7250-3480	0	---	X10	S4	500	
1291	2.5	1860-7000	27	---	X2	S5	475	
1291	2.5	8130-2000	27	---	X2	S5	475	
1293	1.4	8160-2000	28	---	X2	S5	400	HOLD DOWN S1 AND PRESS S5.
1294	1.4	8100-4070	0	48	SH	S1	400	
1299	2.5	8160-2300	16	---	X4	--	375	
1602	7.5	4130-2000	44	---	X2	S5	375	
1603	6.3	6100-2354	21	---	X2	S5	375	
1609	1.1	5130-2400	0	---	X2	--	225	CAP = G. HOLD DOWN S1 AND PRESS S5.
1612	6.3	7200-3485	10	---	X4	S5	175	
1612	6.3	7250-3481	14	---	X4	S5	175	CAP GRID. CAP = G. PIN GRID.
1613	6.3	7250-3481	14	---	X4	S5	175	
1614	6.3	7250-3481	14	---	X4	S5	175	CAP = P.
1616	4.3	4100-0000	0	30	SH	S2	650	

TUBE TYPE	FIL.	SELECTORS	BIAS	SHUNT	MULT	PRESS	MIN. MUT. COND	NOTATIONS
5731	6.3	6140-3070	20	---	X2	S5	675	
5732	6.3	7200-3485	13	---	X2	S5	450	CAP = G.
5742	4.3	4130-2000	10	---	X2	S5	250	
5785	1.1	6700-1000	0	0	SH	S1	400	
5812	6.3	4310-5602	28	---	X4	S5	650	NOTE 2.
5823	OFF	0000-1030	0	91	SH	S6	650	PLACE A 1 MEGOHM 1/2 WATT RESISTOR ACROSS PINS 1 AND 4 IN LOCTAL SOCKET.
5824	25.0	7250-3480	20	---	X10	S4	300	
5825	1.4	4100-0000	0	0	SH	S6	250	CAP = P.
5838	12.6	7200-5381	0	20	SH	S3	650	DUAL DIODE. NOTE 1.
5839	25.0	7200-5380	0	35	SH	S3	400	DUAL DIODE. NOTE 1.
5842	6.3	3950-1060	19	--	X20	S5	375	
5851	2.5	7180-3600	30	---	X2	S5	500	
5854	1.1	3540-1200	20	---	X1	S5	350	
5875	1.1	3540-1200	13	---	X4	S5	300	
5879	6.3	4510-8739	20	---	X2	S5	300	
5886	1.1	3470-1200	57	---	X1	S5	100	NOTE 2.
5894	12.6	1762-0340	35	--	X4	S5	625	RIGHT CAP = P. USE ADAPT 1050-107
5894	12.6	1726-0340	35	--	X4	S5	625	LEFT CAP = P.
5961	6.3	7250-3468						
5901	6.3	3610-5740	16	---	X4	S5	475	
5910	1.4	1760-2300	19	---	X2	S5	275	USE FOR SHORT CHECK ONLY
5961	6.3	7250-4068	30	--	X4	S5	625	DO NOT USE FOR SHORTS
5967	1.1	4263-8100	18	---	X2	S4	300	DUAL TRIODE. NOTE 1.
5992	6.3	7250-3480	13	---	X4	S5	550	
5998	7.5	7841-5263	27	--	X20	S4	425	DUAL TRIODE. NOTE 1.
6000	25.0	7210-5830	16	---	X10	S5	375	
6004	5.0	8200-0000	0	25	SH	S3	450	NEAR CAP = P.
6004	5.0	8200-0000	0	25	SH	S3	450	FAR CAP = P.
6007	1.1	3540-1200	25	---	X1	S5	250	
6007A	1.1	3540-1200	25	---	X1	S5	250	
6008	0.6	3540-2100	28	---	X1	S5	60	
6026	6.3	4570-8030	25	---	X4	S5	650	
6029	1.1	2430-1000	34	---	X2	S5	625	
6046	25.0	7250-3481	25	---	X10	--	375	HOLD DOWN S1, PRESS S5
6064	6.3	3410-5726	11	--	X10	S5	300	
6087	5.0	8200-6400	0	40	SH	S3	400	DUAL DIODE. NOTE 1.
6088	1.1	3540-1200	19	---	X1	S5	400	
6094	6.3	3510-4280	18	---	X4	S5	575	
6099	6.3	4356-2170	17	---	X10	S5	325	DUAL TRIODE. NOTE 1.
6100	6.3	4360-1070	25	---	X2	S5	675	
6101	6.3	4356-2170	14	---	X10	S5	375	DUAL TRIODE. NOTE 1.
6106	5.0	8200-6400	0	35	SH	S3	400	DUAL DIODE. NOTE 1.
6113	6.3	7841-5263	13	---	X4	S5	250	DUAL TRIODE. NOTE 1.
6145	6.3	8160-2374	0	---	X10	S5	400	
6147	2.5	7180-3600	30	---	X2	S5	500	
6169	6.3	3610-2040	13	---	X4	S5	625	
6184	6.3	3600-2745	0	78	SH	S1	400	DUAL DIODE. NOTE 1.
6188	6.3	7841-5263	13	---	X4	S5	250	DUAL TRIODE. NOTE 1.
R6279	6.3	7200-0080	0	30	SH	S3	650	TOP WASHER = P.
6355	6.3	5310-4270	0	100	SH	S5	----	EYE 1 OPEN. EYE 2 CLOSED.
6355	6.3	5340-1270	0	100	SH	S5	----	EYE 2 OPEN. EYE 1 CLOSED.
6877	6.3	5310-4080	62	---	X4	S5	625	
6888	6.3	7240-8653	37	---	X2	S5	650	
6954	6.3	4310-5627	10	---	X2	S5	625	
7193	6.3	7200-0080	23	---	X4	S5	475	FAR CAP = G. NEAR CAP = P.
8005	10.0	4130-0000	0	---	X4	S5	400	CAP = P.
8013A	3.0	4100-0000	0	82	SH	S6	650	CAP = P.
8016	1.1	7200-0000	0	80	SH	S6	400	CAP = P.
9001	6.3	4310-5670	20	---	X2	S5	350	
9002	6.3	4360-1070	25	---	X2	S5	600	
9003	6.3	4310-5620	12	---	X2	S5	475	
9004	6.3	6100-3040	0	78	SH	S1	400	



TUBE TYPE	FIL.	SELECTORS	BIAS	SHUNT	MULT	PRESS	MIN. MUT. COND	NOTATIONS
9005	4.3	6100-4030	0	65	SH	S1	400	RIGHT CAP = P. USE ADAPT 1050-107 LEFT CAP = P.
9006	6.3	4300-1070	0	65	SH	S1	400	
AX9903	12.6	1762-0340	35	--	X4	S5	625	
AX9903	12.6	1726-0340	35	--	X4	S5	625	
38142	7.5	4130-2000	37	---	X2	S5	625	
XXB	2.5	1850-6000	10	---	X2	S4	350	TRIODE NO. 1.
XXB	2.5	8140-3000	10	---	X2	S4	350	TRIODE NO. 2.
XXD	12.6	8154-6372	27	---	X4	S5	325	DUAL TRIODE. NOTE 1.
XXFM	6.3	8130-2040	11	---	X4	S5	150	TRIODE SECTION.
XXFM	6.3	8100-5647	0	77	SH	S1	400	DUAL DIODE. NOTE 1.
XXL	6.3	8160-2070	23	---	X4	S5	400	

TUBE TYPE	FIL.	SELECTIONS	HIAS	SHUNT	MULT	PRESS	MIN. MUT. COND	NOTATIONS
VT67	2.0	4130-2000	43	---	X2	S5	275	
HY69	6.3	5130-0240	0	---	X4	S5	475	CAP = P.
70A7	75.0	7250-3480	80	---	X4	S5	475	PENTODE SECTION.
70A7	75.0	7200-1000	0	58	SH	--	650	RECT. SECTION. REVERSE METER. HOLD DOWN S7 AND PRESS S3.
70L7	75.0	7250-3460	10	---	X10	--	475	PENTODE SECTION. HOLD DOWN S1 & PRESS S5
70L7	75.0	7200-8013	0	55	SH	S3	650	RECT. SECTION.
71A	5.0	4130-2000	69	---	X2	S5	525	
75	6.3	6100-2050	11	---	X4	S5	175	TRIODE SECTION. CAP = G.
75	6.3	6100-4352	11	32	SH	S1	400	DUAL DIODE. NOTE 1.
76	6.3	5130-2040	32	---	X2	S5	450	
77	6.3	6100-2354	18	---	X2	S5	375	CAP = G.
78	6.3	6100-2354	13	---	X2	S5	450	CAP = G.
79	6.3	6103-5240	13	---	X2	S5	300	DUAL TRIODE. CAP = G. NOTE 1.
81	7.5	4100-2000	0	0	SH	S3	400	
82	2.5	4100-3200	0	55	SH	S3	650	DUAL DIODE. NOTE 1.
83V	5.0	4100-3200	0	60	SH	S3	650	DUAL DIODE. NOTE 1.
84	6.3	5100-3240	0	25	SH	S3	650	DUAL DIODE. NOTE 1.
85	6.3	6100-2050	42	---	X2	S5	300	TRIODE SECTION. CAP = G.
85	6.3	6100-4352	42	30	SH	S1	400	DUAL DIODE. NOTE 1.
85AS	6.3	6100-2050	26	---	X2	S5	375	TRIODE SECTION. CAP = G.
85AS	6.3	6100-4352	26	30	SH	S1	400	DUAL DIODE. NOTE 1.
89/89Y	6.3	6100-2354	29	---	X2	S5	475	CAP = G.
99	3.0	4130-2000	20	---	X1	S5	250	
112A	5.0	4130-2000	48	---	X2	S5	525	
CK113	50.0	7250-3486	32	---	X2	S5	550	PENTODE SECTION.
CK113	50.0	7200-6013	0	40	SH	S3	650	RECT. SECTION.
HY114	1.4	7200-0000	22	---	X2	S5	350	RIGHT CAP = P. LEFT CAP = G.
117L7/M7	117.0	7240-3580	28	---	X4	S5	625	PENTODE SECTION.
117L7/M7	117.0	7200-6010	0	55	SH	S3	650	RECT. SECTION.
117N7	OFF	7200-8000	---	---	---	---	---	USE THIS SETTING FOR SHORT CHECK ONLY.
117N7	117.0	7200-8000	0	55	SH	--	650	RECT. SECTION. SHORT ON 3-4. HOLD DOWN S7 AND PRESS S3.
117N7	117.0	7240-3560	30	---	X10	S5	300	PENTODE SECTION.
117P7	OFF	7200-8000	---	---	---	---	---	USE THIS SETTING FOR SHORT CHECK ONLY.
117P7	117.0	7200-8000	0	55	SH	--	650	RECT. SECTION. SHORT ON 3-4. HOLD DOWN S7 AND PRESS S3.
117P7	117.0	7240-3560	28	---	X4	S5	625	PENTODE SECTION.
117Z3	117.0	4300-5060	0	50	SH	S3	650	
117Z4	117.0	7200-5080	0	50	SH	S3	650	
117Z6	117.0	7200-5384	0	50	SH	S3	650	DUAL DIODE. NOTE 1.
X-155	6.3	4572-6183	14	---	X10	S5	425	DUAL TRIODE. NOTE 1.
183	5.0	4130-2000	79	---	X2	S5	475	
244A	2.0	5130-2040	42	---	X2	S5	150	
257A	3.0	4100-2000	16	---	X1	S5	300	CAP = G.
259A	2.0	5100-2340	19	---	X2	S5	250	CAP = G.
264C	1.4	4130-2000	20	---	X1	S5	300	
271A	5.0	5130-2040	32	---	X4	S5	400	
274A	5.0	1400-2000	0	50	SH	S3	400	PLATE NO. 1
274A	5.0	1400-3000	0	40	SH	S3	400	PLATE NO. 2
283A	2.0	5100-2340	28	---	X2	S5	300	CAP = G.
285A	2.0	5100-2340	31	---	X2	S5	300	CAP = G.
286A	2.0	1600-2354	30	--	X2	S5	200	CAP=G
310A	10.0	6100-2354	20	---	X2	S5	475	CAP = G.
311A	10.0	5100-2340	31	---	X2	S5	700	CAP = G.
328A	7.5	1600-2354	18	--	X2	S5	575	CAP=G
349A	6.3	2750-3480	10	--	X4	S5	575	
482A	5.0	4130-2000	79	---	X2	S5	475	
482B	5.0	4130-2000	58	---	X2	S5	475	
483	5.0	4130-2000	79	---	X2	S5	475	
485	3.0	5130-2040	37	---	X2	S5	400	
GL502A	6.3	7250-3086	---	93	SH	S6	650	STRIKES AT ABOUT 28. NOTE 6.
CK502AX	1.1	3540-1200	17	---	X1	S5	350	

TUBE TYPE	FIL.	SELECTORS	BIAS	SHUNT	MULT	PRESS	MIN. MUT. COND	NOTATIONS
CK503AX	1.1	3540-1200	20	---	X1	S5	350	SECTION NO. 1.
CK505AX	0.6	3540-1200	17	---	X1	S5	100	
CK506AX	1.1	3540-1200	32	---	X1	S5	300	
CK510AX	0.6	4710-2306	0	0	SH	S6	50	
CK510AX	0.6	4760-5301	0	0	SH	S6	50	SECTION NO. 2.
CK512AX	0.6	3540-1200	15	---	X1	S5	100	
CK518AX	1.1	3540-1200	18	---	X1	S5	350	
CK522AX	1.1	3540-1200	20	---	X1	S5	275	
CK523AX	1.1	3540-1200	28	---	X1	S5	225	
CK524AX	1.1	3540-1200	45	---	X1	S5	175	
CK525AX	1.1	3540-1200	29	---	X1	S5	200	
CK526AX	1.1	3540-1200	34	---	X1	S5	250	
CK527AX	1.1	3540-1200	15	---	X1	S5	150	
CK528AX	1.1	3540-1200	17	---	X1	S5	275	
CK529AX	1.1	3540-1200	39	---	X1	S5	225	
CK533AX	1.1	3540-1200	23	---	X1	S5	250	
CK535AX	1.1	3540-1200	39	---	X1	S5	225	
CK536AX	1.1	3540-1200	23	---	X1	S5	250	
CK541DX	1.1	3540-1200	16	---	X1	S5	250	MAKE NO GAS TEST. STRIKES AT ABOUT 73. NOTE 6.
CK542DX	1.1	3540-1200	35	---	X1	S5	200	
CK543DX	0.6	3540-2100	0	0	SH	S1	200	
CK544DX	1.1	3540-1200	15	---	X1	S5	200	
CK546DX	1.4	3540-1200	20	---	X1	S5	275	
GL546	6.3	4310-7520	---	35	SH	S3	650	
CK547DX	1.1	3540-1200	15	---	X1	S5	250	
CK548DX	1.1	3540-1200	29	---	X1	S5	175	
CK556AX	1.1	4230-1000	26	---	X2	S5	500	
CK568AX	1.1	4230-1000	38	---	X2	S5	200	
CK569AX	1.1	3540-1200	8	---	X1	S5	525	
CK571AX	1.1	3470-1200	57	---	X1	S5	100	
CK573AX	1.1	2430-1000	34	---	X2	S5	625	
CK574AX	0.6	3540-1200	15	---	X1	S5	100	
CK578AX	1.1	3540-1200	35	---	X2	S5	800	
CK605CX	6.3	3470-1265	10	---	X4	S5	675	
CK606BX	6.3	2300-1040	0	80	SH	S1	400	
CK608CX	6.3	3450-1060	22	---	X10	S5	300	
CK619CX	6.3	2340-1050	7	---	X10	S5	250	STRIKES AT ABOUT 20. NOTE 6.
629	3.0	5130-2040	---	93	SH	S6	650	
717A	6.3	7240-8631	8	---	X4	S5	475	
801A	7.5	4130-2000	0	---	X2	S5	475	
802	6.3	7140-0365	0	---	X2	S5	625	CAP = P.
807	6.3	5130-0240	28	---	X4	S5	600	CAP = P.
809	6.3	4130-0000	0	---	X2	S5	525	CAP = P.
811A	6.3	4130-0000	0	---	X2	S5	425	CAP = P.
812	6.3	4130-0000	0	---	X2	S5	625	CAP = P.
814	10.0	5130-0240	0	---	X2	S5	750	CAP = P. FUSE LAMP WILL GLOW BRIGHTLY.
815	6.3	8570-0432	20	---	X4	S5	625	PENTODE NO. 1. LEFT CAP = P.
815	6.3	1520-0437	20	---	X4	S5	625	PENTODE NO. 2. RIGHT CAP = P.
816	3.0	4100-0000	0	58	SH	S3	650	CAP = P.
SD828A	6.3	4630-1520	22	---	X4	S5	300	TOP LEAD = P.
SD828E	6.3	4630-0512	12	---	X10	S5	325	
829B	6.3	5762-0340	15	---	X10	S5	475	
829B	6.3	5126-0340	15	---	X10	S5	475	
832A	6.3	5762-0340	28	---	X4	S5	550	RIGHT CAP = P. USE ADAPT 1050-107
832A	6.3	5126-0340	28	---	X4	S5	550	LEFT CAP = P.
834	7.5	4100-0000	0	---	X2	S5	525	NEAR BAP = G. FAR CAP = P.
836	4.3	1800-0000	0	55	SH	S3	650	CAP = P.
837	12.6	7140-0365	0	---	X4	S5	475	CAP = P.
841	7.5	4130-2000	15	---	X2	S5	325	CAP = P.
842	7.5	4130-2000	52	---	X2	S5	350	
843	2.5	5130-2040	12	---	X2	S5	500	
864	1.1	4130-2000	45	---	X2	S5	200	
865	7.5	4130-0200	35	---	X2	S5	200	

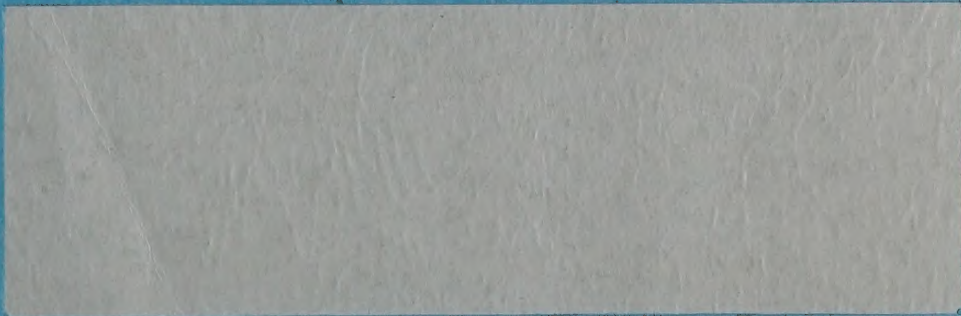






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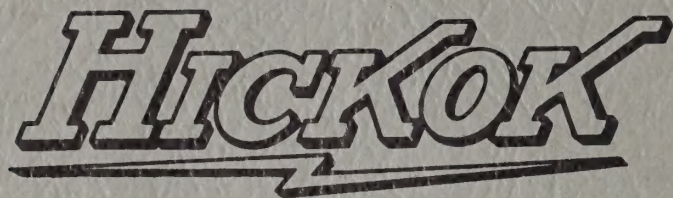












*LEADER IN DEPENDABILITY SINCE 1910*

**INSTRUCTION MANUAL  
for**

**MODEL 752A  
DYNAMIC MUTUAL CONDUCTANCE  
TUBE TESTER**

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